

-15



SEQUENCE LISTING

<110> De Canck, Ilse
Rombout, Annelies
Rossau, Rudi

<120> METHOD FOR THE AMPLIFICATION OF HLA CLASS I ALLELES

<130> IGJ-002

<140> PCT/EP00/02998

<141> 2000-04-05

<150> EP 99870068.6

<151> 1999-04-09

<150> US 60/138,614

<151> 1999-06-11

<160> 446

<170> PatentIn Ver. 2.1

<210> 1

<211> 20

<212> DNA

<213> Homo sapiens

<400> 1

atctcggacc cggagactgt

20

<210> 2

<211> 21

<212> DNA

<213> Homo sapiens

<400> 2

gatctcggac ccggagactg t

21

<210> 3

<211> 22

<212> DNA

<213> Homo sapiens

<400> 3

ggatctcgga cccggagact gt

22

<210> 4

<211> 23

<212> DNA

<213> Homo sapiens

<400> 4

yggatctcgg acccggagac tgt

23

<210> 5

<211> 24

<212> DNA
<213> Homo sapiens

<400> 5
gyggatctcg gacccggaga ctgt

24

<210> 6
<211> 25
<212> DNA
<213> Homo sapiens

<400> 6
ggyggatctc ggacccggag actgt

25

<210> 7
<211> 20
<212> DNA
<213> Homo sapiens

<400> 7
ggtctcggrg tcccgcggt

20

<210> 8
<211> 21
<212> DNA
<213> Homo sapiens

<400> 8
gggtctcggr gtcccgcggc t

21

<210> 9
<211> 22
<212> DNA
<213> Homo sapiens

<400> 9
agggtctcgg rgtcccgcgg ct

22

<210> 10
<211> 23
<212> DNA
<213> Homo sapiens

<400> 10
aagggtctcg grgtcccgcg gct

23

<210> 11
<211> 24
<212> DNA
<213> Homo sapiens

<400> 11
caagggtctc ggrgtcccgc ggct

24

<210> 12
<211> 20
<212> DNA
<213> Homo sapiens

<400> 12
ctccccgggdc aaggggtctcg 20

<210> 13
<211> 21
<212> DNA
<213> Homo sapiens

<400> 13
tctccccgggd caaggggtctc g 21

<210> 14
<211> 22
<212> DNA
<213> Homo sapiens

<400> 14
ctctccccggg dcaaggggtct cg 22

<210> 15
<211> 23
<212> DNA
<213> Homo sapiens

<400> 15
cctctccccg gdcaaggggtc tcg 23

<210> 16
<211> 24
<212> DNA
<213> Homo sapiens

<400> 16
gcctctcccc ggdcagggt ctcg 24

<210> 17
<211> 25
<212> DNA
<213> Homo sapiens

<400> 17
ggcctctccc gggdcaagggt tctcg 25

<210> 18
<211> 20
<212> DNA
<213> Homo sapiens

<400> 18
tctccccgggd caaggggtctc 20

<210> 19
<211> 21
<212> DNA
<213> Homo sapiens

<400> 19
ctctcccggg dcaaggtct c 21

<210> 20
<211> 22
<212> DNA
<213> Homo sapiens

<400> 20
cctctcccgg gdcaagggtc tc 22

<210> 21
<211> 23
<212> DNA
<213> Homo sapiens

<400> 21
gcctctcccg ggdcaagggt ctc 23

<210> 22
<211> 24
<212> DNA
<213> Homo sapiens

<400> 22
ggcctctccc ggdcaagggt tctc 24

<210> 23
<211> 25
<212> DNA
<213> Homo sapiens

<400> 23
gggcctctcc cggdcaagg gtctc 25

<210> 24
<211> 20
<212> DNA
<213> Homo sapiens

<400> 24
ggtgtcctgt ccattctcaa 20

<210> 25
<211> 21
<212> DNA
<213> Homo sapiens

<400> 25
rggtgtcctg tccattctca a 21

<210> 26
<211> 22
<212> DNA
<213> Homo sapiens

<400> 26
crggtgtcct gtccattctc aa 22

<210> 27
<211> 23
<212> DNA
<213> Homo sapiens

<400> 27
ccrggtgtcc tgtccattct caa 23

<210> 28
<211> 24
<212> DNA
<213> Homo sapiens

<400> 28
ccrggtgtc ctgtccattc tcaa 24

<210> 29
<211> 25
<212> DNA
<213> Homo sapiens

<400> 29
tcccrngtgt cctgtccatt ctcaa 25

<210> 30
<211> 20
<212> DNA
<213> Homo sapiens

<400> 30
cctgggcctc tcccgggdca 20

<210> 31
<211> 21
<212> DNA
<213> Homo sapiens

<400> 31
gcctgggcct ctcccgggdc a 21

<210> 32
<211> 22
<212> DNA

<213> Homo sapiens

<400> 32

cgcttgggcc tctcccggd ca

22

<210> 33

<211> 23

<212> DNA

<213> Homo sapiens

<400> 33

gcgctgggc ctctcccgg dca

23

<210> 34

<211> 24

<212> DNA

<213> Homo sapiens

<400> 34

ggcgctggg cctctcccgg gdca

24

<210> 35

<211> 25

<212> DNA

<213> Homo sapiens

<400> 35

aggcgctgg gcctctccc ggdc

25

<210> 36

<211> 20

<212> DNA

<213> Homo sapiens

<400> 36

aggcgctgg gcctctccc

20

<210> 37

<211> 21

<212> DNA

<213> Homo sapiens

<400> 37

aaggcgctg gcctctccc g

21

<210> 38

<211> 22

<212> DNA

<213> Homo sapiens

<400> 38

waaggcgctt ggcctctcc cg

22

<210> 39

<211> 23
<212> DNA
<213> Homo sapiens

<400> 39
twaaggcgcc tgggcctctc ccg 23

<210> 40
<211> 24
<212> DNA
<213> Homo sapiens

<400> 40
gtwaaggcgc ctgggcctct cccg 24

<210> 41
<211> 25
<212> DNA
<213> Homo sapiens

<400> 41
ggtwaaggcg cctgggcctc tcccg 25

<210> 42
<211> 20
<212> DNA
<213> Homo sapiens

<400> 42
ccgggtwaag gcgcctgggc 20

<210> 43
<211> 21
<212> DNA
<213> Homo sapiens

<400> 43
accgggtwaa gggcctggg c 21

<210> 44
<211> 22
<212> DNA
<213> Homo sapiens

<400> 44
aaccgggtwa aggcgcctgg gc 22

<210> 45
<211> 23
<212> DNA
<213> Homo sapiens

<400> 45
aaaccgggtw aaggcgcctg ggc 23

<210> 46
<211> 24
<212> DNA
<213> Homo sapiens

<400> 46
gaaaccgggt waaggcgctt gggc 24

<210> 47
<211> 25
<212> DNA
<213> Homo sapiens

<400> 47
tgaaaccggg twaaggcgcc tgggc 25

<210> 48
<211> 20
<212> DNA
<213> Homo sapiens

<400> 48
yccvgtcccg accaaccygg 20

<210> 49
<211> 21
<212> DNA
<213> Homo sapiens

<400> 49
gyccvgtccc gaccaaccy g 21

<210> 50
<211> 22
<212> DNA
<213> Homo sapiens

<400> 50
ygyccvgtccc cgaccaaccy gg 22

<210> 51
<211> 23
<212> DNA
<213> Homo sapiens

<400> 51
cygyccvgtccc ccgaccaacc ygg 23

<210> 52
<211> 24
<212> DNA
<213> Homo sapiens

<400> 52

ccygyccvgc cccgaccaac cygg

24

<210> 53
<211> 25
<212> DNA
<213> Homo sapiens

<400> 53
ccygyccvgc ccccgaccaa ccygg

25

<210> 54
<211> 20
<212> DNA
<213> Homo sapiens

<400> 54
cggacgggcc rggtsrccca

20

<210> 55
<211> 21
<212> DNA
<213> Homo sapiens

<400> 55
acggacgggc crggtsrccc a

21

<210> 56
<211> 22
<212> DNA
<213> Homo sapiens

<400> 56
cacggacggg ccrggtsrcc ca

22

<210> 57
<211> 23
<212> DNA
<213> Homo sapiens

<400> 57
ccacggacgg gccrggtsrc cca

23

<210> 58
<211> 24
<212> DNA
<213> Homo sapiens

<400> 58
cccacggacg ggccrggtsr ccca

24

<210> 59
<211> 25
<212> DNA
<213> Homo sapiens

<400> 59
ccccacggac gggccrggts rccca 25

<210> 60
<211> 20
<212> DNA
<213> Homo sapiens

<400> 60
ggtccgagat ccrccccgaa 20

<210> 61
<211> 21
<212> DNA
<213> Homo sapiens

<400> 61
gggtccgaga tccrccccga a 21

<210> 62
<211> 22
<212> DNA
<213> Homo sapiens

<400> 62
cgggtccgag atccrccccg aa 22

<210> 63
<211> 23
<212> DNA
<213> Homo sapiens

<400> 63
ccgggtccga gatccrcccc gaa 23

<210> 64
<211> 24
<212> DNA
<213> Homo sapiens

<400> 64
tccgggtccg agatccrccc cgaa 24

<210> 65
<211> 25
<212> DNA
<213> Homo sapiens

<400> 65
ctccgggtcc gagatccrcc ccgaa 25

<210> 66
<211> 20

<212> DNA
<213> Homo sapiens

<400> 66
ccccgaagcc gcgggacycc 20

<210> 67
<211> 21
<212> DNA
<213> Homo sapiens

<400> 67
rccccgaagc cgcgggacyc c 21

<210> 68
<211> 22
<212> DNA
<213> Homo sapiens

<400> 68
crccccgaag ccgcgggacy cc 22

<210> 69
<211> 23
<212> DNA
<213> Homo sapiens

<400> 69
ccrccccgaa gcccggggac ycc 23

<210> 70
<211> 24
<212> DNA
<213> Homo sapiens

<400> 70
tccrccccga agccgcgggg cycc 24

<210> 71
<211> 25
<212> DNA
<213> Homo sapiens

<400> 71
atccrccccg aagccgcggg acycc 25

<210> 72
<211> 20
<212> DNA
<213> Homo sapiens

<400> 72
cccgaagccg cgggacyccg 20

<210> 73
<211> 21
<212> DNA
<213> Homo sapiens

<400> 73
ccccgaagcc gcgggacycc g

21

<210> 74
<211> 22
<212> DNA
<213> Homo sapiens

<400> 74
rccccgaagc cgcgggacyc cg

22

<210> 75
<211> 23
<212> DNA
<213> Homo sapiens

<400> 75
crccccgaag ccgcgggacy ccg

23

<210> 76
<211> 24
<212> DNA
<213> Homo sapiens

<400> 76
ccrccccgaa gccgcgggac yccg

24

<210> 77
<211> 25
<212> DNA
<213> Homo sapiens

<400> 77
tccrccccga agccgcggga cyccg

25

<210> 78
<211> 20
<212> DNA
<213> Homo sapiens

<400> 78
gcgctgttg agtgtcgcaa

20

<210> 79
<211> 21
<212> DNA
<213> Homo sapiens

<400> 79
ggcgctgttg gagtgtcgca a

21

<210> 80
<211> 22
<212> DNA
<213> Homo sapiens

<400> 80
gggcgctgtt ggagtgtcgc aa

22

<210> 81
<211> 23
<212> DNA
<213> Homo sapiens

<400> 81
tgggcgctgt tggagtgtcg caa

23

<210> 82
<211> 24
<212> DNA
<213> Homo sapiens

<400> 82
atgggcgctg ttggagtgtc gcaa

24

<210> 83
<211> 25
<212> DNA
<213> Homo sapiens

<400> 83
catgggcgct gttggagtgt cgcaa

25

<210> 84
<211> 20
<212> DNA
<213> Homo sapiens

<400> 84
cgcgggacgc cgagaccctt

20

<210> 85
<211> 21
<212> DNA
<213> Homo sapiens

<400> 85
ccgcgggacy ccgagaccct t

21

<210> 86
<211> 22
<212> DNA
<213> Homo sapiens

<400> 86
gccgcgggac yccgagacc tt 22

<210> 87
<211> 23
<212> DNA
<213> Homo sapiens

<400> 87
agccgcggga cyccgagacc ctt 23

<210> 88
<211> 24
<212> DNA
<213> Homo sapiens

<400> 88
aagccgcggg acyccgagac cttt 24

<210> 89
<211> 25
<212> DNA
<213> Homo sapiens

<400> 89
gaagccgcgg gacyccgaga ccctt 25

<210> 90
<211> 20
<212> DNA
<213> Homo sapiens

<400> 90
gacyccgaga cccttgdtccc 20

<210> 91
<211> 21
<212> DNA
<213> Homo sapiens

<400> 91
ggacyccgag acccttgdtcc c 21

<210> 92
<211> 22
<212> DNA
<213> Homo sapiens

<400> 92
gggacyccga gacccttgdc cc 22

<210> 93
<211> 23
<212> DNA

<213> Homo sapiens
<400> 93
cgggacyccg agacccttgd ccc 23

<210> 94
<211> 24
<212> DNA
<213> Homo sapiens
<400> 94
gcgggacycc gagacccttg dccc 24

<210> 95
<211> 25
<212> DNA
<213> Homo sapiens
<400> 95
cgcgggacyc cgagaccctt gdccc 25

<210> 96
<211> 20
<212> DNA
<213> Homo sapiens
<400> 96
gacccttgdc ccgggagagg 20

<210> 97
<211> 21
<212> DNA
<213> Homo sapiens
<400> 97
agacccttgd cccgggagag g 21

<210> 98
<211> 22
<212> DNA
<213> Homo sapiens
<400> 98
gagacccttg dcccgggaga gg 22

<210> 99
<211> 23
<212> DNA
<213> Homo sapiens
<400> 99
cgagaccctt gdcccgggag agg 23

<210> 100

<211> 24
<212> DNA
<213> Homo sapiens

<400> 100
ccgagaccct tgdcccggga gagg 24

<210> 101
<211> 25
<212> DNA
<213> Homo sapiens

<400> 101
yccgagaccc ttgdcccggg agagg 25

<210> 102
<211> 20
<212> DNA
<213> Homo sapiens

<400> 102
gttttagcca aaaatccccc 20

<210> 103
<211> 21
<212> DNA
<213> Homo sapiens

<400> 103
agtttaggcc aaaaatcccc c 21

<210> 104
<211> 22
<212> DNA
<213> Homo sapiens

<400> 104
cagtttaggc caaaaatccc cc 22

<210> 105
<211> 23
<212> DNA
<213> Homo sapiens

<400> 105
tcagtttagg ccaaaaatcc ccc 23

<210> 106
<211> 24
<212> DNA
<213> Homo sapiens

<400> 106
ttcagtttag gccaaaaatc cccc 24

<210> 107
<211> 25
<212> DNA
<213> Homo sapiens

<400> 107
tttcagttta ggccaaaaat ccccc 25

<210> 108
<211> 21
<212> DNA
<213> Homo sapiens

<400> 108
accgcgggg attttgcct c 21

<210> 109
<211> 22
<212> DNA
<213> Homo sapiens

<400> 109
aaccgcggg gattttggc tc 22

<210> 110
<211> 23
<212> DNA
<213> Homo sapiens

<400> 110
caaccgcgg ggattttggc ctc 23

<210> 111
<211> 24
<212> DNA
<213> Homo sapiens

<400> 111
ccaaccgcg gggattttg cctc 24

<210> 112
<211> 25
<212> DNA
<213> Homo sapiens

<400> 112
mccaaccgc ggggattttg gcctc 25

<210> 113
<211> 26
<212> DNA
<213> Homo sapiens

<400> 113

gmccaacccg cggggatttt ggccctc

26

<210> 114
<211> 20
<212> DNA
<213> Homo sapiens

<400> 114
cyggggcgsga ggtcacgact

20

<210> 115
<211> 21
<212> DNA
<213> Homo sapiens

<400> 115
ccyggggcgs aggtcacgac t

21

<210> 116
<211> 22
<212> DNA
<213> Homo sapiens

<400> 116
gccyggggcg saggtcacga ct

22

<210> 117
<211> 23
<212> DNA
<213> Homo sapiens

<400> 117
ggccyggggc gsaggtcacg act

23

<210> 118
<211> 24
<212> DNA
<213> Homo sapiens

<400> 118
cgcccygggg cgsaggtcac gact

24

<210> 119
<211> 25
<212> DNA
<213> Homo sapiens

<400> 119
ccggccyggg gcgsaggtca cgact

25

<210> 120
<211> 20
<212> DNA
<213> Homo sapiens

<400> 120
cccggtttca ttttcagttg 20

<210> 121
<211> 21
<212> DNA
<213> Homo sapiens

<400> 121
accggtttc attttcagtt g 21

<210> 122
<211> 22
<212> DNA
<213> Homo sapiens

<400> 122
taccggttt cattttcagt tg 22

<210> 123
<211> 23
<212> DNA
<213> Homo sapiens

<400> 123
ttaccggtt tcattttcag ttg 23

<210> 124
<211> 24
<212> DNA
<213> Homo sapiens

<400> 124
tttaccggt ttcattttca gttg 24

<210> 125
<211> 25
<212> DNA
<213> Homo sapiens

<400> 125
gtttaccggt tttcattttc agttg 25

<210> 126
<211> 20
<212> DNA
<213> Homo sapiens

<400> 126
gtcgagggtc tgggcgggtt 20

<210> 127
<211> 21

<212> DNA
<213> Homo sapiens

<400> 127
ggtcgagggt ctgggcgggt t 21

<210> 128
<211> 22
<212> DNA
<213> Homo sapiens

<400> 128
cggtcgaggg tctgggcggg tt 22

<210> 129
<211> 23
<212> DNA
<213> Homo sapiens

<400> 129
ccggtcgagg gtctgggcgg gtt 23

<210> 130
<211> 24
<212> DNA
<213> Homo sapiens

<400> 130
yccggtcgag ggtctgggcg gggt 24

<210> 131
<211> 25
<212> DNA
<213> Homo sapiens

<400> 131
cyccggtcga gggctctgggc gggtt 25

<210> 132
<211> 20
<212> DNA
<213> Homo sapiens

<400> 132
cgccccragt ctccssgtct 20

<210> 133
<211> 21
<212> DNA
<213> Homo sapiens

<400> 133
tcgccccrag tctccssgtc t 21

<210> 134
<211> 22
<212> DNA
<213> Homo sapiens

<400> 134
gtcgcccccra gtctccssgt ct 22

<210> 135
<211> 23
<212> DNA
<213> Homo sapiens

<400> 135
ggtcgccccr agtctccssg tct 23

<210> 136
<211> 24
<212> DNA
<213> Homo sapiens

<400> 136
gggtcgcccc ragtctccss gtct 24

<210> 137
<211> 25
<212> DNA
<213> Homo sapiens

<400> 137
cggtcgccc cragtctccs sgtct 25

<210> 138
<211> 20
<212> DNA
<213> Homo sapiens

<400> 138
cgrccggrga gagccccagt 20

<210> 139
<211> 21
<212> DNA
<213> Homo sapiens

<400> 139
tcgrccggrg agagccccag t 21

<210> 140
<211> 22
<212> DNA
<213> Homo sapiens

<400> 140
ctcgrccggr gagagcccca gt 22

<210> 141
<211> 23
<212> DNA
<213> Homo sapiens

<400> 141
cctcgrccgg rgagagcccc agt

23

<210> 142
<211> 24
<212> DNA
<213> Homo sapiens

<400> 142
ccctcgrccg grgagagccc cagt

24

<210> 143
<211> 25
<212> DNA
<213> Homo sapiens

<400> 143
accctcgrcc ggrgagagcc ccagt

25

<210> 144
<211> 25
<212> DNA
<213> Homo sapiens

<400> 144
ttctccccag acgccgagga tggcc

25

<210> 145
<211> 22
<212> DNA
<213> Homo sapiens

<400> 145
gggaggagcg aggggaccsc ag

22

<210> 146
<211> 21
<212> DNA
<213> Homo sapiens

<400> 146
agcgaggggc ccgcccggcg a

21

<210> 147
<211> 26
<212> DNA
<213> Homo sapiens

<400> 147
ccgtgcgctg cagcgtctcc ttcccg 26

<210> 148
<211> 23
<212> DNA
<213> Homo sapiens

<400> 148
ggaggccatc cccggcgacc tat 23

<210> 149
<211> 23
<212> DNA
<213> Homo sapiens

<400> 149
ggagatgggg aaggctcccc act 23

<210> 150
<211> 20
<212> DNA
<213> Homo sapiens

<400> 150
agcccgggag atctayaggc 20

<210> 151
<211> 21
<212> DNA
<213> Homo sapiens

<400> 151
cagcccggga gatctayagg c 21

<210> 152
<211> 22
<212> DNA
<213> Homo sapiens

<400> 152
ccagcccggg agatctayag gc 22

<210> 153
<211> 23
<212> DNA
<213> Homo sapiens

<400> 153
gccagcccgg gagatctaya ggc 23

<210> 154
<211> 24
<212> DNA

<213> Homo sapiens

<400> 154

ggccagcccg ggagatctay aggc

24

<210> 155

<211> 25

<212> DNA

<213> Homo sapiens

<400> 155

aggccagccc gggagatcta yaggc

25

<210> 156

<211> 20

<212> DNA

<213> Homo sapiens

<400> 156

ccctccttgt gggaggccag

20

<210> 157

<211> 21

<212> DNA

<213> Homo sapiens

<400> 157

cccctccttg tgggaggcca g

21

<210> 158

<211> 22

<212> DNA

<213> Homo sapiens

<400> 158

tccccctcctt gtgggaggcc ag

22

<210> 159

<211> 23

<212> DNA

<213> Homo sapiens

<400> 159

ctccccctct tgtgggaggc cag

23

<210> 160

<211> 24

<212> DNA

<213> Homo sapiens

<400> 160

tctccccctcc ttgtgggagg ccag

24

<210> 161

<211> 25
<212> DNA
<213> Homo sapiens

<400> 161
gtctcccctc cttgtgggag gccag 25

<210> 162
<211> 20
<212> DNA
<213> Homo sapiens

<400> 162
cccaawtgtc tcccctcctt 20

<210> 163
<211> 21
<212> DNA
<213> Homo sapiens

<400> 163
tcccaawtgt ctcccctcct t 21

<210> 164
<211> 22
<212> DNA
<213> Homo sapiens

<400> 164
gtcccaawtg tctcccctcc tt 22

<210> 165
<211> 23
<212> DNA
<213> Homo sapiens

<400> 165
ggtcccaawt gtctcccctc ctt 23

<210> 166
<211> 24
<212> DNA
<213> Homo sapiens

<400> 166
tggtcccaaw tgtctcccct cctt 24

<210> 167
<211> 25
<212> DNA
<213> Homo sapiens

<400> 167
ttggtcccaa wtgtctcccc tcctt 25

<210> 168
<211> 20
<212> DNA
<213> Homo sapiens

<400> 168
ctagtgttg tcccaawtgt 20

<210> 169
<211> 21
<212> DNA
<213> Homo sapiens

<400> 169
tctagtgtg gtcccaawtg t 21

<210> 170
<211> 22
<212> DNA
<213> Homo sapiens

<400> 170
ttctagtgtt ggtcccaawt gt 22

<210> 171
<211> 23
<212> DNA
<213> Homo sapiens

<400> 171
attctagtgt tgggtcccaaw tgt 23

<210> 172
<211> 24
<212> DNA
<213> Homo sapiens

<400> 172
tattctagtgt ttgggtcccaa wtgt 24

<210> 173
<211> 25
<212> DNA
<213> Homo sapiens

<400> 173
atattctagt gttgggtccca awtgt 25

<210> 174
<211> 20
<212> DNA
<213> Homo sapiens

<400> 174

gggygatatt ctagtggttg

20

<210> 175
<211> 21
<212> DNA
<213> Homo sapiens

<400> 175
aggygatat tctagtgttg g

21

<210> 176
<211> 22
<212> DNA
<213> Homo sapiens

<400> 176
gaggygata ttctagtgtt gg

22

<210> 177
<211> 23
<212> DNA
<213> Homo sapiens

<400> 177
ggaggygat attctagtgt tgg

23

<210> 178
<211> 24
<212> DNA
<213> Homo sapiens

<400> 178
ggaggyga tattctagtgt ttgg

24

<210> 179
<211> 25
<212> DNA
<213> Homo sapiens

<400> 179
aggaggyg atattctagt gttgg

25

<210> 180
<211> 20
<212> DNA
<213> Homo sapiens

<400> 180
ggaggygat attctagtgt

20

<210> 181
<211> 21
<212> DNA
<213> Homo sapiens

<400> 181
gggaggggyga tattctagtg t 21

<210> 182
<211> 22
<212> DNA
<213> Homo sapiens

<400> 182
agggaggggyg atattctagt gt 22

<210> 183
<211> 23
<212> DNA
<213> Homo sapiens

<400> 183
gaggaggggy gatattctag tgt 23

<210> 184
<211> 24
<212> DNA
<213> Homo sapiens

<400> 184
agagggaggg ygatattcta gtgt 24

<210> 185
<211> 25
<212> DNA
<213> Homo sapiens

<400> 185
cagagggagg gygatattct agtgt 25

<210> 186
<211> 20
<212> DNA
<213> Homo sapiens

<400> 186
cccaggagga ktcctctccc 20

<210> 187
<211> 21
<212> DNA
<213> Homo sapiens

<400> 187
accaggagg aktcctctcc c 21

<210> 188
<211> 22

<212> DNA
<213> Homo sapiens

<400> 188
aaccaggag gaktctctc cc 22

<210> 189
<211> 23
<212> DNA
<213> Homo sapiens

<400> 189
aaaccagga ggaktctct ccc 23

<210> 190
<211> 24
<212> DNA
<213> Homo sapiens

<400> 190
gaaaccagg aggaktctc tccc 24

<210> 191
<211> 25
<212> DNA
<213> Homo sapiens

<400> 191
ggaaaccag gaggaktct ctccc 25

<210> 192
<211> 20
<212> DNA
<213> Homo sapiens

<400> 192
aggatctgga aaccaggag 20

<210> 193
<211> 21
<212> DNA
<213> Homo sapiens

<400> 193
caggatctgg aaaccagga g 21

<210> 194
<211> 22
<212> DNA
<213> Homo sapiens

<400> 194
acaggatctg gaaaccagg ag 22

<210> 195
<211> 23
<212> DNA
<213> Homo sapiens

<400> 195
tacaggatct ggaaacccag gag 23

<210> 196
<211> 24
<212> DNA
<213> Homo sapiens

<400> 196
gtacaggatc tggaaaccca ggag 24

<210> 197
<211> 25
<212> DNA
<213> Homo sapiens

<400> 197
ggtacaggat ctggaaaccc aggag 25

<210> 198
<211> 20
<212> DNA
<213> Homo sapiens

<400> 198
tcagagtcac tctctggtac 20

<210> 199
<211> 21
<212> DNA
<213> Homo sapiens

<400> 199
ctcagagtca ctctctggta c 21

<210> 200
<211> 22
<212> DNA
<213> Homo sapiens

<400> 200
cctcagagtc actctctggt ac 22

<210> 201
<211> 23
<212> DNA
<213> Homo sapiens

<400> 201
acctcagagt cactctctgg tac 23

<210> 202
<211> 24
<212> DNA
<213> Homo sapiens

<400> 202
aacctcagag tcactctctg gtac

24

<210> 203
<211> 25
<212> DNA
<213> Homo sapiens

<400> 203
gaacctcaga gtcactctct ggtac

25

<210> 204
<211> 20
<212> DNA
<213> Homo sapiens

<400> 204
ttctgtgctc ycttcccat

20

<210> 205
<211> 21
<212> DNA
<213> Homo sapiens

<400> 205
gttctgtgct cycttcccca t

21

<210> 206
<211> 22
<212> DNA
<213> Homo sapiens

<400> 206
ggttctgtgc tcycttcccc at

22

<210> 207
<211> 23
<212> DNA
<213> Homo sapiens

<400> 207
gggttctgtg ctcycttccc cat

23

<210> 208
<211> 24
<212> DNA
<213> Homo sapiens

<400> 208
tggggttctgt gctcyccttcc ccat

24

<210> 209
<211> 25
<212> DNA
<213> Homo sapiens

<400> 209
ctgggttctg tgctcyccttc cccat

25

<210> 210
<211> 20
<212> DNA
<213> Homo sapiens

<400> 210
ctggwggagt gtcccatkac

20

<210> 211
<211> 21
<212> DNA
<213> Homo sapiens

<400> 211
gctggwggag tgtcccatka c

21

<210> 212
<211> 22
<212> DNA
<213> Homo sapiens

<400> 212
tgctggwga gtgtcccatk ac

22

<210> 213
<211> 23
<212> DNA
<213> Homo sapiens

<400> 213
rtgctggwgg agtgtcccat kac

23

<210> 214
<211> 24
<212> DNA
<213> Homo sapiens

<400> 214
tttaccggt ttcattttca gttg

24

<210> 215
<211> 25
<212> DNA

<213> Homo sapiens

<400> 215

gyrtgctggw ggagtgtccc atkac

25

<210> 216

<211> 20

<212> DNA

<213> Homo sapiens

<400> 216

gtcccatkac agatrcmmaa

20

<210> 217

<211> 21

<212> DNA

<213> Homo sapiens

<400> 217

tgtcccatka cagatrcmma a

21

<210> 218

<211> 22

<212> DNA

<213> Homo sapiens

<400> 218

gtgtcccatk acagatrcmm aa

22

<210> 219

<211> 23

<212> DNA

<213> Homo sapiens

<400> 219

agtgtcccat kacagatrcm maa

23

<210> 220

<211> 24

<212> DNA

<213> Homo sapiens

<400> 220

gagtgtccca tkacagatrc mmaa

24

<210> 221

<211> 25

<212> DNA

<213> Homo sapiens

<400> 221

ggagtgtccc atkacagatr cmmaa

25

<210> 222

<211> 26
<212> DNA
<213> Homo sapiens

<400> 222
cgtttaccgc gtttcatttt cagttg 26

<210> 223
<211> 27
<212> DNA
<213> Homo sapiens

<400> 223
gcgtttaccg ggtttcattt tcagttg 27

<210> 224
<211> 28
<212> DNA
<213> Homo sapiens

<400> 224
cgcgtttacc cggtttcatt ttcagttg 28

<210> 225
<211> 20
<212> DNA
<213> Homo sapiens

<400> 225
cgtkggagsc catccccgsc 20

<210> 226
<211> 21
<212> DNA
<213> Homo sapiens

<400> 226
tcgkkgags ccatccccgs c 21

<210> 227
<211> 22
<212> DNA
<213> Homo sapiens

<400> 227
ctcgkkgag sccatccccg sc 22

<210> 228
<211> 23
<212> DNA
<213> Homo sapiens

<400> 228
tctcgkkgga gscatcccc gsc 23

<210> 229
<211> 24
<212> DNA
<213> Homo sapiens

<400> 229
ttctcgtkkg agsccatccc cgsc 24

<210> 230
<211> 25
<212> DNA
<213> Homo sapiens

<400> 230
cttctcgtkg gagsccatcc cggsc 25

<210> 231
<211> 20
<212> DNA
<213> Homo sapiens

<400> 231
tctcgtkkgg gscatcccc 20

<210> 232
<211> 21
<212> DNA
<213> Homo sapiens

<400> 232
ttctcgtkkg agsccatccc c 21

<210> 233
<211> 22
<212> DNA
<213> Homo sapiens

<400> 233
cttctcgtkg gagsccatcc cc 22

<210> 234
<211> 23
<212> DNA
<213> Homo sapiens

<400> 234
tcttctcgtk ggagsccatc ccc 23

<210> 235
<211> 24
<212> DNA
<213> Homo sapiens

<400> 235

ytctttctcgt kggagsccat cccc

24

<210> 236
<211> 25
<212> DNA
<213> Homo sapiens

<400> 236
cytctttctcg tkggagscca tcccc

25

<210> 237
<211> 20
<212> DNA
<213> Homo sapiens

<400> 237
gatcccattt tctctcytctt

20

<210> 238
<211> 21
<212> DNA
<213> Homo sapiens

<400> 238
tgatcccatt ttcctcytct t

21

<210> 239
<211> 22
<212> DNA
<213> Homo sapiens

<400> 239
ctgatcccat tttcctcytc tt

22

<210> 240
<211> 23
<212> DNA
<213> Homo sapiens

<400> 240
gctgatccca ttttcctcyt ctt

23

<210> 241
<211> 24
<212> DNA
<213> Homo sapiens

<400> 241
cgctgatccc attttcctcy tctt

24

<210> 242
<211> 25
<212> DNA
<213> Homo sapiens

<400> 242
gcgctgatcc cattttcctc ytett

25

<210> 243
<211> 20
<212> DNA
<213> Homo sapiens

<400> 243
gctgatccca ttttcctcyt

20

<210> 244
<211> 21
<212> DNA
<213> Homo sapiens

<400> 244
cgctgatccc attttcctcy t

21

<210> 245
<211> 22
<212> DNA
<213> Homo sapiens

<400> 245
gcgctgatcc cattttcctc yt

22

<210> 246
<211> 23
<212> DNA
<213> Homo sapiens

<400> 246
agcgctgatc ccattttcct cyt

23

<210> 247
<211> 24
<212> DNA
<213> Homo sapiens

<400> 247
tagcgctgat cccattttcc tcyt

24

<210> 248
<211> 25
<212> DNA
<213> Homo sapiens

<400> 248
ctagcgctga tccatttttc ctcyt

25

<210> 249
<211> 20

<212> DNA

<213> Homo sapiens

<400> 249

tccattcaag ggagggcgac

20

<210> 250

<211> 21

<212> DNA

<213> Homo sapiens

<400> 250

ctccattcaa gggagggcga c

21

<210> 251

<211> 22

<212> DNA

<213> Homo sapiens

<400> 251

tctccattca agggagggcg ac

22

<210> 252

<211> 23

<212> DNA

<213> Homo sapiens

<400> 252

ttctccattc aaggaggggc gac

23

<210> 253

<211> 24

<212> DNA

<213> Homo sapiens

<400> 253

attctccatt caaggagggg cgac

24

<210> 254

<211> 25

<212> DNA

<213> Homo sapiens

<400> 254

cattctccat tcaaggagg ggcgac

25

<210> 255

<211> 20

<212> DNA

<213> Homo sapiens

<400> 255

agattatccc aggtgcctgc

20

<210> 256
 <211> 21
 <212> DNA
 <213> Homo sapiens

<400> 256
 gagattatcc caggtgcctg c

21

<210> 257
 <211> 22
 <212> DNA
 <213> Homo sapiens

<400> 257
 ggagattatc ccaggtgcct gc

22

<210> 258
 <211> 23
 <212> DNA
 <213> Homo sapiens

<400> 258
 aggagattat cccaggtgcc tgc

23

<210> 259
 <211> 24
 <212> DNA
 <213> Homo sapiens

<400> 259
 taggagatta tcccaggtgc ctgc

24

<210> 260
 <211> 25
 <212> DNA
 <213> Homo sapiens

<400> 260
 ataggagatt atcccaggtg cctgc

25

<210> 261
 <211> 20
 <212> DNA
 <213> Homo sapiens

<400> 261
 tgtcctgycc attctcagkc

20

<210> 262
 <211> 21
 <212> DNA
 <213> Homo sapiens

<400> 262
 gtgtcctgyc cattctcagk c

21

<210> 263

<211> 22

<212> DNA

<213> Homo sapiens

<400> 263

ggtgtcctgy ccattctcag kc

22

<210> 264

<211> 23

<212> DNA

<213> Homo sapiens

<400> 264

aggtgtcctg yccattctca gkc

23

<210> 265

<211> 24

<212> DNA

<213> Homo sapiens

<400> 265

caggtgtcct gyccattctc agkc

24

<210> 266

<211> 25

<212> DNA

<213> Homo sapiens

<400> 266

ccaggtgtcc tgyccattct cagkc

25

<210> 267

<211> 19

<212> DNA

<213> Homo sapiens

<400> 267

tcacatgggt ggtcctagg

19

<210> 268

<211> 20

<212> DNA

<213> Homo sapiens

<400> 268

gtcacatggg tggcctagg

20

<210> 269

<211> 21

<212> DNA

<213> Homo sapiens

<400> 269
ggtcacatgg gtggtcctag g

21

<210> 270
<211> 22
<212> DNA
<213> Homo sapiens

<400> 270
tggtcacatg ggtggtccta gg

22

<210> 271
<211> 23
<212> DNA
<213> Homo sapiens

<400> 271
ctggtcacat ggggtggtcct agg

23

<210> 272
<211> 24
<212> DNA
<213> Homo sapiens

<400> 272
kctggtcaca tgggtgggtcc tagg

24

<210> 273
<211> 25
<212> DNA
<213> Homo sapiens

<400> 273
gkctggtcac atgggtgggtc ctagg

25

<210> 274
<211> 20
<212> DNA
<213> Homo sapiens

<400> 274
tsccatgara gatgcmaagc

20

<210> 275
<211> 21
<212> DNA
<213> Homo sapiens

<400> 275
gtscatgar agatgcmaag c

21

<210> 276
<211> 22
<212> DNA

<213> Homo sapiens

<400> 276
tgttccatga ragatgcmaa gc 22

<210> 277
<211> 23
<212> DNA
<213> Homo sapiens

<400> 277
gtgttccatg aragatgcma agc 23

<210> 278
<211> 24
<212> DNA
<213> Homo sapiens

<400> 278
ggtgttccat garagatgcm aagc 24

<210> 279
<211> 25
<212> DNA
<213> Homo sapiens

<400> 279
gggtgttcca tgaragatgc maagc 25

<210> 280
<211> 20
<212> DNA
<213> Homo sapiens

<400> 280
gwawtttctg actcttccca 20

<210> 281
<211> 21
<212> DNA
<213> Homo sapiens

<400> 281
tgawtttct gactcttccc a 21

<210> 282
<211> 22
<212> DNA
<213> Homo sapiens

<400> 282
ctgwawtttc tgactcttcc ca 22

<210> 283

<211> 23
<212> DNA
<213> Homo sapiens

<400> 283
cctgwawttt ctgactcttc cca

23

<210> 284
<211> 24
<212> DNA
<213> Homo sapiens

<400> 284
gcctgwawtt tctgactctt ccca

24

<210> 285
<211> 25
<212> DNA
<213> Homo sapiens

<400> 285
cgctgwawt ttctgactct tccca

25

<210> 286
<211> 20
<212> DNA
<213> Homo sapiens

<400> 286
gtgcctgtgt ccaggctggc

20

<210> 287
<211> 21
<212> DNA
<213> Homo sapiens

<400> 287
ggtgcctgtg tccaggctgg c

21

<210> 288
<211> 22
<212> DNA
<213> Homo sapiens

<400> 288
aggtgcctgt gtccaggctg gc

22

<210> 289
<211> 23
<212> DNA
<213> Homo sapiens

<400> 289
caggtgcctg tgtccaggct ggc

23

<210> 290
 <211> 24
 <212> DNA
 <213> Homo sapiens

<400> 290
 ccaggtgcct gtgtccaggc tggc

24

<210> 291
 <211> 25
 <212> DNA
 <213> Homo sapiens

<400> 291
 cccaggtgcc tgtgtccagg ctggc

25

<210> 292
 <211> 20
 <212> DNA
 <213> Homo sapiens

<400> 292
 tggcgtctgg gttctgtgcc

20

<210> 293
 <211> 21
 <212> DNA
 <213> Homo sapiens

<400> 293
 ctggcgtctg ggttctgtgc c

21

<210> 294
 <211> 22
 <212> DNA
 <213> Homo sapiens

<400> 294
 gctggcgtct gggttctgtg cc

22

<210> 295
 <211> 23
 <212> DNA
 <213> Homo sapiens

<400> 295
 ggctggcgtc tgggttctgt gcc

23

<210> 296
 <211> 24
 <212> DNA
 <213> Homo sapiens

<400> 296

aggctggcgt ctgggttctg tgcc

24

<210> 297

<211> 25

<212> DNA

<213> Homo sapiens

<400> 297

caggctggcg tctgggttct gtgcc

25

<210> 298

<211> 20

<212> DNA

<213> Homo sapiens

<400> 298

ctcaggatrg tcacatggsc

20

<210> 299

<211> 21

<212> DNA

<213> Homo sapiens

<400> 299

tctcaggatr gtcacatggs c

21

<210> 300

<211> 22

<212> DNA

<213> Homo sapiens

<400> 300

ttctcaggat rgtcacatgg sc

22

<210> 301

<211> 23

<212> DNA

<213> Homo sapiens

<400> 301

rttctcagga trgtcacatg gsc

23

<210> 302

<211> 24

<212> DNA

<213> Homo sapiens

<400> 302

crttctcagg atrgtcacat ggsc

24

<210> 303

<211> 25

<212> DNA

<213> Homo sapiens

<400> 303
ccrtttctcag gatrgtcaca tggsc 25

<210> 304
<211> 20
<212> DNA
<213> Homo sapiens

<400> 304
scaagagaga wrcaaagtgt 20

<210> 305
<211> 21
<212> DNA
<213> Homo sapiens

<400> 305
cscaagagag awrcaaagtg t 21

<210> 306
<211> 22
<212> DNA
<213> Homo sapiens

<400> 306
tcscaagaga gawrcaaagt gt 22

<210> 307
<211> 23
<212> DNA
<213> Homo sapiens

<400> 307
gtcscaagag agawrcaaag tgt 23

<210> 308
<211> 24
<212> DNA
<213> Homo sapiens

<400> 308
tgtcscaaga gagawrcaaa gtgt 24

<210> 309
<211> 25
<212> DNA
<213> Homo sapiens

<400> 309
gtgtcscaag agagawrcaa agtgt 25

<210> 310
<211> 22

<212> DNA
<213> Homo sapiens

<400> 310
accgcgggg atttttggcc tc 22

<210> 311
<211> 21
<212> DNA
<213> Homo sapiens

<400> 311
ttgggcagac cctcatgctg c 21

<210> 312
<211> 20
<212> DNA
<213> Homo sapiens

<400> 312
tcggcagccc ctcatgctgt 20

<210> 313
<211> 20
<212> DNA
<213> Homo sapiens

<400> 313
catctcaggg tgmrgggctt 20

<210> 314
<211> 27
<212> DNA
<213> Homo sapiens

<400> 314
ygmccaaccc gcggggattt tggectc 27

<210> 315
<211> 240
<212> DNA
<213> Homo sapiens

<400> 315
gtgagtgacc ccggcccggg ggcgaggtca cgaccctca tccccacgg acgggccagg 60
tcgccacag tctccgggtc cgagatccac cccgaagccg cgggacccg agacccttgc 120
cccgggagag gcccaggcgc cttaccggg tttcattttc agtttaggcc aaaaatcccc 180
ccgggttggc cggggcgggc ggggctcggg ggactgggct gaccgcgggg tcggggccag 240

<210> 316
<211> 241
<212> DNA
<213> Homo sapiens

<400> 316

```
gtgagtgacc ccggcccggg ggcaggtca cgacctctca tccccacgg acgggccagg 60
tcgcccacag tctccgggtc cgagatccgc cccgaagccg cgggacccc agacccttgc 120
cccgaggagag gccagggcgc ctttaccggg ttctattttc agtttaggcc aaaaatcccc 180
ccaggttggg cggggcgggg cggggctcgg gggaccgggc tgaccgcggg gtccggggcca 240
g 241
```

<210> 317
<211> 241
<212> DNA
<213> Homo sapiens

```
<400> 317
gtgagtgacc ccggcccggg ggcaggtca cgacctctca tccccacgg acgggccagg 60
tcgcccacag tctccgggtc cgagatccgc cccgaagccg cgggacccc agacccttgc 120
cccgaggagag gccagggcgc ctttaccggg ttctattttc agtttaggcc aaaaatcccc 180
ccaggttggg cggggcgggg cggggctcgg gggaccgggc tgaccgcggg gtccggggcca 240
g 241
```

<210> 318
<211> 241
<212> DNA
<213> Homo sapiens

```
<400> 318
gtgagtgacc ccggcccggg ggcaggtca cgacctctca tccccacgg acgggccagg 60
tcgcccacag tctccgggtc cgagatccgc cccgaagccg cgggacccc agacccttgc 120
cccgaggagag gccagggcgc ctttaccggg ttctattttc agtttaggcc aaaaatcccc 180
ccaggttggg cggggcgggg cggggctcgg gggaccgggc tgaccgcggg gtccggggcca 240
g 241
```

<210> 319
<211> 241
<212> DNA
<213> Homo sapiens

```
<400> 319
gtgagtgacc ccggcccggg ggcaggtca cgacctctca tccccacgg acgggccagg 60
tcgcccacag tctccgggtc cgagatccgc cccgaagccg cgggacccc agacccttgc 120
cccgaggagag gccagggcgc ctttaccggg ttctattttc agtttaggcc aaaaatcccc 180
ccaggttggg cggggcgggg cggggctcgg gggaccgggc tgaccgcggg gtccggggcca 240
g 241
```

<210> 320
<211> 241
<212> DNA
<213> Homo sapiens

```
<400> 320
gtgagtgacc ccggcccggg ggcaggtca cgacctctca tccccacgg acgggccagg 60
tcgcccacag tctccgggtc cgagatccgc cccgaagccg cgggacccc agacccttgc 120
cccgaggagag gccagggcgc ctttaccggg ttctattttc agtttaggcc aaaaatcccc 180
ccaggttggg cggggcgggg cggggctcgg gggaccgggc tgaccgcggg gtccggggcca 240
g 241
```

<210> 321
<211> 240

<212> DNA
<213> Homo sapiens

<400> 321
gtgagtgacc ccggcccggg cgcaggtcac gacctctcat ccccccacgga cggggccagg 60
cgcccacagt ctccgggtcc gagatccgcc ccgaagccgc gggaccccga gacccttgcc 120
ccgggagagg cccaggcgcc tttaaccggg ttcatcttca gtttaggcca aaaatcccc 180
cgggttggtc ggggcggggc ggggctcggg ggaccgggct gaccgcgggg tccgggccag 240

<210> 322
<211> 241
<212> DNA
<213> Homo sapiens

<400> 322
gtgagtgacc ccggcccggg ggcaggtca cgaacctca tccccacgg acgggccagg 60
tcgcccacag tctccgggtc cgagatccgc ccgaagccgc cgggaccccg agacccttgc 120
cccgggagag gccaggcgcc ctttaaccgg ttcatcttca agtttaggcc aaaaatcccc 180
cgggttggtc cggggcgggg cggggctcgg gggaccgggc tgacctcggg gtccgggccca 240
g 241

<210> 323
<211> 241
<212> DNA
<213> Homo sapiens

<400> 323
gtgagtgacc ccggcccggg ggcaggtca cgaacctca tccccacgg acgggccagg 60
tcgcccacag tctccgggtc cgagatccgc ccgaagccgc cgggaccccg agacccttgc 120
cccgggagag gccaggcgcc ctttaaccgg ttcatcttca agtttaggcc aaaaatcccc 180
cgggttggtc cggggcgggg cggggctcgg gggaccgggc tgacctcggg gtccgggccca 240
g 241

<210> 324
<211> 241
<212> DNA
<213> Homo sapiens

<400> 324
gtgagtgacc ccggcccggg ggcaggtca cgaacctca tccccacgg acgggccagg 60
tcgcccacag tctccgggtc cgagatccgc ccgaagccgc cgggaccccg agacccttgc 120
cccgggagag gccaggcgcc ctttaaccgg ttcatcttca agtttaggcc aaaaatcccc 180
cgggttggtc cggggcgggg cggggctcgg gggaccgggc tgacctcggg gtccgggccca 240
g 241

<210> 325
<211> 241
<212> DNA
<213> Homo sapiens

<400> 325
gtgagtgacc ccggcccggg ggcaggtca cgaacctca tccccacgg acgggccagg 60
tcgcccacag tctccgggtc cgagatccgc ccgaagccgc cgggaccccg agacccttgc 120
cccgggagag gccaggcgcc ctttaaccgg ttcatcttca agtttaggcc aaaaatcccc 180
cgggttggtc cggggcgggg cggggctcgg gggaccgggc tgacctcggg gtccgggccca 240
g 241

<210> 326
<211> 240
<212> DNA
<213> Homo sapiens

<400> 326
gtgagtgacc cgggcccggg cgcaggtcac gacccctcat ccccccacgga cgggccaggt 60
cgcccacagt ctccgggtcc gagatccgcc ccgaagccgc gggaccccga gacccttgcc 120
ccgggagagg cccaggcgcc tttagccggg ttcattttca gtttaggcca aaaatcccc 180
cgggttggtc ggggcggggc ggggctcggg ggaccgggct gacctcggg tccgggccag 240

<210> 327
<211> 240
<212> DNA
<213> Homo sapiens

<400> 327
gtgagtgacc cgggcccggg cgcaggtcac gacccctcat cccctacgga cgggccaggt 60
cgcccacagt ctccgggtcc gagatccacc ccgaagccgc gggaccccga gacccttgcc 120
ccgggagagg cccaggcgcc tttagccggg ttcattttca gtttaggcca aaaatcccc 180
cgggttggtc ggggcggggc ggggctcggg ggaccgggct gaccgcgggg tcggggccag 240

<210> 328
<211> 240
<212> DNA
<213> Homo sapiens

<400> 328
gtgagtgacc cgggccgggg cgcaggtcac gacccctcat ccccccacgga cgggccaggt 60
cgcccacagt ctccgggtcc gagatccacc ccgaagccgc gggaccccga gacccttgac 120
ccgggagagg cccaggcgcc tttagccggg ttcattttca gtttaggcca aaaattcccc 180
cgggttggtc ggggctgggc ggggctcggg ggactgggct gaccgcgggg tcggggccag 240

<210> 329
<211> 240
<212> DNA
<213> Homo sapiens

<400> 329
gtgagtgacc cgggccgggg cgcaggtcac gacccctcat ccccccacgga cgggccaggt 60
cgcccacagt ctccgggtcc gagatccacc ccgaagccgc gggaccccga gacccttgac 120
ccgggagagg cccaggcgcc tttagccggg ttcattttca gtttaggcca aaaattcccc 180
cgggttggtc ggggctgggc ggggctcggg ggactgggct gaccgcgggg tcggggccag 240

<210> 330
<211> 241
<212> DNA
<213> Homo sapiens

<400> 330
gtgagtgacc cggccccggg ggcaggtca cgacccctca tccccacgg acgggccagg 60
tcgcccacag tctccgggtc cgagatccac ccgaagccgc cgggaccccg agacccttga 120
cccgggagag gccaggcgcc ctttaccggg ttcattttc agtttaggcc aaaaattccc 180
ccgggttggt cggggtcggg cggggtcggg ggactgggct tgaccgcggg gtcggggcca 240
g 241

<210> 331
<211> 241
<212> DNA
<213> Homo sapiens

<400> 331
gtgagtgacc ccggcccgagg ggcaggtca ggacccctca tccccacgg acgggccagg 60
tcgcccacag tctccgggtc cgagatccac cccgaagccg cgggaccccg agacccttgc 120
cccgggagag gccagggcg ctttaccggg ttctattttc agtttaggcc aaaaatcccc 180
ccgggttggg cggggctggg cggggctcgg gggactgggc tgaccgcggg gtcggggcca 240
g 241

<210> 332
<211> 241
<212> DNA
<213> Homo sapiens

<400> 332
gtgagtgacc ccggcccgagg ggcaggtca cgacccctca tccccacgg acgggccagg 60
tcgcccacag tctccgggtc cgagatccac cccgaagccg cgggactcgg agacccttgc 120
cccgggagag gccagggcg ctttaccggg ttctattttc agtttaggcc aaaaatcccc 180
ccgggttggg cggggcgagg cggggctcgg gggactgggc tgaccgcggg gtcggggcca 240
g 241

<210> 333
<211> 241
<212> DNA
<213> Homo sapiens

<400> 333
gtgagtgacc ccggcccgagg ggcaggtca cgacccctca tccccacgg acgggccagg 60
tcgcccacag tctccgggtc cgagatccac cccgaagccg cgggaccccg agacccttgc 120
cccgggagag gccagggcg ctttaccggg ttctattttc agtttaggcc aaaaatcccc 180
ccgggttggg cggggccagg cggggctcgg gggactgggc tgaccgcggg gtcggggcca 240
g 241

<210> 334
<211> 241
<212> DNA
<213> Homo sapiens

<400> 334
gtgagtgacc ccggcccgagg ggcaggtca cgacccctca tccccacgg acgggccagg 60
tcgcccacag tctccgggtc cgagatccac cccgaagccg cgggaccccg agacccttgc 120
cccgggagag gccagggcg ctttaccggg ttctattttc agtttaggcc aaaaatcccc 180
ccgggttggg cggggccagg cggggctcgg gggactgggc tgaccgcggg gtcggggcca 240
g 241

<210> 335
<211> 241
<212> DNA
<213> Homo sapiens

<400> 335
gtgagtgacc ccggcccgagg ggcaggtca cgacccctca tccccacgg acgggccagg 60
tcgcccacag tctccgggtc cgagatccac cccgaagccg cgggaccccg agacccttgc 120

cccgaggagag gccagggcg cttaacccgg ttccattttc agtttaggcc aaaaatcccc 180
ccgggttggt cggggccggg cggggctcgg gggactgggc tgaccgcggg gtcggggcca 240
g 241

<210> 336
<211> 241
<212> DNA
<213> Homo sapiens

<400> 336
gtgagtgacc ccggcccggg ggcaggtca cgaacctca tccccacgg acgggccggg 60
tcgcccacag tctccgggtc cgagatccac ccgaagccg cgggacccg agacccttgc 120
cccgaggagag gccagggcg cttaacccgg ttccattttc agtttaggcc aaaaatcccc 180
ccgggttggt cggggccggg cggggctcgg gggactgggc tgaccgcggg gtcggggcca 240
g 241

<210> 337
<211> 241
<212> DNA
<213> Homo sapiens

<400> 337
gtgagtgacc ccggcccggg ggcaggtca cgaacctca tccccacgg acgggccagg 60
tggcccacag tctccgggtc cgagatccac ccgaagccg cgggacccg agacccttgc 120
cccgaggagag gccagggcg cttaacccgg ttccattttc agtttaggcc aaaaatcccc 180
ccgggttggt cggggccggg cggggctcgg gggactgggc tgaccgcggg gtcggggcca 240
g 241

<210> 338
<211> 241
<212> DNA
<213> Homo sapiens

<400> 338
gtgagtgacc ccggcccggg ggcaggtca cgaacctca tccccacgg acgggccagg 60
tcgcccacag tctccgggtc cgagatccgc ccgaagccg cgggacccg agacccttgc 120
cccgaggagag gccagggcg cttaacccgg ttccattttc agtttaggcc aaaaatcccc 180
ccgggttggt cggggccgga cggggctcgg gggactgggc tgaccgtggg gtcggggcca 240
g 241

<210> 339
<211> 240
<212> DNA
<213> Homo sapiens

<400> 339
gtgagtgacc ccggccgggg cgcaggtcag gacctctcat cccccacgga cgggccagg 60
cgcccacagt ctcgggtcc gagatccacc ccgaagccg gggacccga gacccttgc 120
ccgggagagg ccagggcg cttaacccgt ttccattttc gtttaggcca aaaaatcccc 180
cgggttggtc ggggcccggac ggggctcggg ggactgggct gaccgtgggg tcggggccag 240

<210> 340
<211> 241
<212> DNA
<213> Homo sapiens

<400> 340

```
gtgagtgacc ccggccccggg ggcaggtca cgacctctca tccccacgg acgggccagg 60
tcgccacag tctccgggtc cgagatccac cccgaagccg cgggaccccg agacccttgc 120
cccgggagag gccaggcgc ctttaccggg ttccattttc agtttaggcc aaaaatcccc 180
ccgggttggt cggggccgga cggggctcgg gggactgggc tgaccgtggg gtcggggcca 240
g 241
```

<210> 341

<211> 241

<212> DNA

<213> Homo sapiens

<400> 341

```
gtgagtgacc ccggccccggg ggcaggtca cgacctctca tccccacgg acgggccagg 60
tcgccacag tctccgggtc cgagatccac cccgaagccg cgggaccccg agacccttgc 120
cccgggagag gccaggcgc ctttaccggg ttccattttc agtttaggcc aaaaatcccc 180
ccgggttggt cggggccgga cggggctcgg gggactgggc tgaccgtggg gtcggggcca 240
g 241
```

<210> 342

<211> 241

<212> DNA

<213> Homo sapiens

<400> 342

```
gtgagtgacc ccagccccggg ggcaggtca cgacctctca tccccacgg acgggccagg 60
tcacccacag tctccgggtc cgagatccac cccgaagccg cgggaccccg agacccttgc 120
cccgggagag gccaggcgc ctttaccggg ttccattttc agtttaggcc aaaaatcccc 180
ccgggttggt cggggccgga cggggctcgg gggactgggc tgaccgtggg gtcggggcca 240
g 241
```

<210> 343

<211> 241

<212> DNA

<213> Homo sapiens

<400> 343

```
gtgagtgacc ccagccccggg ggcaggtca cgacctctca tccccacgg acgggccagg 60
tcacccacag tctccgggtc cgagatccac cccgaagccg cgggaccccg agacccttgc 120
cccgggagag gccaggcgc ctttaccggg ttccattttc agtttaggcc aaaaatcccc 180
ccgggttggt cggggccgga cggggctcgg gggactgggc tgaccgtggg gtcggggcca 240
g 241
```

<210> 344

<211> 241

<212> DNA

<213> Homo sapiens

<400> 344

```
gtgagtgacc ccagccccggg ggcaggtca cgacctctca tccccacgg acgggccagg 60
tcacccacag tctccgggtc cgagatccac cccgaagccg cgggaccccg agacccttgc 120
cccgggagag gccaggcgc ctttaccggg ttccattttc agtttaggcc aaaaatcccc 180
ccgggttggt cggggccgga cggggctcgg gggactgggc tgaccgtggg gtcggggcca 240
g 241
```

<210> 345

<211> 244
<212> DNA
<213> Homo sapiens

<400> 345
gtgagtgacc ccggcccggg gcgcaggtca cgactcccca tccccacgt acggcccggg 60
tcgccccgag tctccgggtc cgagatccgc ccccgaggcc gcgggaccgc cccagaccct 120
cgaccggcga gagccccagg cgcgtttacc cggtttcatt ttcagttgag gccaaaatcc 180
ccgcgggttg gtcggggcgg ggccgggctc ggggggacgg ggctgaccgc ggggcctggg 240
ccag 244

<210> 346
<211> 251
<212> DNA
<213> Homo sapiens

<400> 346
gtgagtgacc ccggcccggg gcgcaggttc acgactcccc atccccacg tacggcccgg 60
gtcgcgccga gtctccgggt ccgagatccg cccccctgag gccgcgggac ccgcccagac 120
cctcgaccgg cgagagcccc aggcgcgttt acccggtttc attttcagtt gaggccaaaa 180
tccccgcggg ttggtcgggg cggggcgggg cggggctcgg gggacggggc tgaccgcggg 240
gcctggggcca g 251

<210> 347
<211> 246
<212> DNA
<213> Homo sapiens

<400> 347
gtgagtgacc ccggcccggg gcgcaggtca cgactcccca tccccacgt acggcccggg 60
tcgccccgga gtctccgggt ccgagatccg cccccctgag gccggggacc cgcgccagacc 120
ctcgaccggc gagagcccca ggcgcggtta cccggtttca ttttcagttg aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcggggggac ggggctgacc gcggggccgg 240
ggccag 246

<210> 348
<211> 242
<212> DNA
<213> Homo sapiens

<400> 348
gtgagtgacc ccggcccggg gcgcaggtca cgactcccca tccccacgt acggcccggg 60
tcgccccgag tctccgggtc cgagatccgc ccccgaggcc gcgggaccgc cccagaccct 120
gaccggcgag agccccaggc gcgtttaccc ggtttcattt tcagttgagg ccaaaaatccc 180
cgcggggttg tcggggcggg gcggggctcg ggggacgggg ctgaccgcgg ggccggggcc 240
ag 242

<210> 349
<211> 246
<212> DNA
<213> Homo sapiens

<400> 349
gtgagtgacc ccggcccggg gcgcaggtca cgactcccca tccccacgt acggcccggg 60
tcgccccgag tctccgggtc cgagatccgc cccctgagg ccgcgggacc cgcgccagacc 120
ctcgaccggc gagagcccca ggcgcggtta cccggtttca ttttcagttg aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcggggggtc ggggctgacc gcggggccgg 240

ggccag

246

<210> 350
<211> 246
<212> DNA
<213> Homo sapiens

<400> 350
gtgagtgacc ccggcccggg ggcaggtca cgactcccca tccccacgt acggcccggg 60
tcgccccgag tctccgggtc cgagatccgc cccctgagg ccgcccggacc cgcccagacc 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcggggggac gggactgacc gcggggccgg 240
ggccag 246

<210> 351
<211> 243
<212> DNA
<213> Homo sapiens

<400> 351
gtgagtgacc ccggcccggg ggcaggtca cgactcccca tccccacgt acggcccggg 60
tcgccccgag tctccgggtc cgagatccgc ccccgaggcc gcggggaccg ccagaccct 120
cgaccggcga gagccccagg cgcgtttacc cggtttcatt ttcagttgag gccaaaatcc 180
ccgcccgggtg gtcggggcgg ggcggggctc gggggacggg gctgaccgcg gggccggggc 240
cag 243

<210> 352
<211> 246
<212> DNA
<213> Homo sapiens

<400> 352
gtgagtgacc ccggcccggg ggcaggtca cgactcccca tccccacgt acggcccggg 60
tcgccccgag tctccgggtc cgagatccgc cccctgagg ccgcccggacc cgcccaaacc 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcgggggacg gggctgaccg cggggccggg 240
gccagg 246

<210> 353
<211> 245
<212> DNA
<213> Homo sapiens

<400> 353
gtgagtgacc ccggcccggg ggcaggtca cgactcccca tccccacgt acggcccggg 60
tcgccccgag tctccgggtc cgagatccgc cccctgagg ccgcccggacc cgcccaaacc 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcgggggacg gggctgaccg cggggccggg 240
gccag 245

<210> 354
<211> 246
<212> DNA
<213> Homo sapiens

<400> 354

```
gtgagtgacc ccggccccggg ggcgagggtca cgactcccca tccccacgt acggccccggg 60
tcgccccgag tctccgggtc cgagatccgc ctccctgagg ccgcgggacc cgcccagacc 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcggggggac ggggctgacc gcggggccgg 240
ggccag 246
```

<210> 355
<211> 245
<212> DNA
<213> Homo sapiens

```
<400> 355
gtgagtgacc ccggccccggg ggcgagggtca cgactcccca tccccacgt acggccccggg 60
tcgccccgag tctccgggtc cgagatccgc ctccctgagg ccgcgggacc cgcccagacc 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcggggggac ggggctgacc gcggggccgg 240
ggccag 245
```

<210> 356
<211> 245
<212> DNA
<213> Homo sapiens

```
<400> 356
gtgagtgacc ccggccccggg ggcgagggtca cgactcccca tccccacgt acggccccggg 60
tcgccccgag tctccgggtc cgagatccgc ctccctgagg ccgcgggacc cgcccagacc 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcggggggac ggggctgacc gcggggccgg 240
ggccag 245
```

<210> 357
<211> 246
<212> DNA
<213> Homo sapiens

```
<400> 357
gtgagtgacc ccggccccggg ggcgagggtca cgactcccca tccccacgg acggccccggg 60
tcgccccgag tctccgggtc cgagatccgc ctccctgagg ccgcgggacc cgcccagacc 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcggggggac ggggctgacc gcggggccgg 240
ggccag 246
```

<210> 358
<211> 246
<212> DNA
<213> Homo sapiens

```
<400> 358
gtgagtgacc ccggccccggg ggcgagggtca cgactcccca tccccacgg acggccccggg 60
tcgccccgag tctccgggtc cgagatccgc ctccctgagg ccgcgggacc cgcccagacc 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcggggggac ggggctgacc gcggggccgg 240
ggccag 246
```

<210> 359
<211> 246

<212> DNA

<213> Homo sapiens

<400> 359

```
gtgagtgacc ccggcccggg gcgcaggtca cgactcccca tccccacgt acggcccggg 60
tcgccccgag tctccgggtc cgagatccgc ctccctgagg ccgcgggacc cgcccagacc 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagtta aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcggggggac ggggctgacc gcggggccgg 240
ggccag 246
```

<210> 360

<211> 245

<212> DNA

<213> Homo sapiens

<400> 360

```
gtgagtgacc ccggcccggg gcgcaggtca cgactcccca tccccacgt acggcccggg 60
tcgccccgag tctccgggtc cgagatccgc ctccctgagg ccgcgggacc cgcccagacc 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcgggggacg gtgctgaccg cggggccggg 240
gccag 245
```

<210> 361

<211> 245

<212> DNA

<213> Homo sapiens

<400> 361

```
gtgagtgacc ccggcccggg gcgcaggtca cgactcccca tccccacgt acggcccggg 60
tcgccccgag tctccgggtc cgagatccgc ctccctgagg ccgcgggacc cgcccagacc 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcgggggacg gtgctgaccg cggggccggg 240
gccag 245
```

<210> 362

<211> 245

<212> DNA

<213> Homo sapiens

<400> 362

```
gtgagtgacc ccggcccggg gcgcaggtca cgactcccca tccccacgt acggcccggg 60
tcgccccgag tctccgggtc cgagatccgc ctccctgagg ccgcgggacc cgcccagacc 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcgggggacg gtgctgaccg cggggccggg 240
gccag 245
```

<210> 363

<211> 245

<212> DNA

<213> Homo sapiens

<400> 363

```
gtgagtgacc ccggcccggg gcgcaggtca cgactcccca tccccacgt acggcccggg 60
tcgccccgag tctccgggtc cgagatccgc ctccctgagg ccgcgggacc cgcccagacc 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcgggggacg gtgctgaccg cggggccggg 240
gccag 245
```

<210> 364
<211> 245
<212> DNA
<213> Homo sapiens

<400> 364
gtgagtgacc ccggccccggg ggcaggtca cgactcccca tccccacgt acggccccggg 60
tcgccccgag tctccgggtc cgagatccgc ctccctgagg ccgctgggacc cgtccagacc 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcgggggact gggctgaccg cggggccggg 240
gccag 245

<210> 365
<211> 244
<212> DNA
<213> Homo sapiens

<400> 365
gtgagtgacc ccggccccggg ggcaggtca cgactcccca tccccacgt acggccccggg 60
tcgccccgag tctccgggtc cgagatccgc ccccgaggcc gggggaccgc cccagaccct 120
cgaccggcga gagccccagg cgcgtttacc cggtttcatt ttcagttgag gccaaaatcc 180
ccgctgggtt gtcggggcgg ggcggggctc ggggggacgg ggctgaccgc gggggcgggg 240
ccag 244

<210> 366
<211> 244
<212> DNA
<213> Homo sapiens

<400> 366
gtgagtgacc ccggccccggg ggcaggtca cgactcccca tccccacgg acggccccggg 60
tcgccccgag tctccgggtc cgagatccgc ccccgaggcc gggggaccgc cccagaccct 120
cgaccggcga gagccccagg cgcgtttacc cggtttcatt ttcagttgag gccaaaatcc 180
ccgctgggtt gtcggggcgg ggcggggctc ggggggacgg ggctgaccgc gggggcgggg 240
ccag 244

<210> 367
<211> 245
<212> DNA
<213> Homo sapiens

<400> 367
gtgagtgacc ccggccccggg ggcaggtca cgactcccca tccccacgt acggccccggg 60
tcgccccgag tctccgggtc cgagatccgc ctccctgagg ccgctgggacc cgtccagacc 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcggggggac ggggctgacc gggggggcgg 240
ggccg 245

<210> 368
<211> 246
<212> DNA
<213> Homo sapiens

<400> 368
gtgagtgacc ccggccccggg ggcaggtca cgactcccca tccccacgt acggccccggg 60

tgcgccccgag tctccgggtc cgagatccgc ctccctgagg ccgcggggacc cgcccagacc 120
ctcgaccggc gagagcccca ggcgcggttta cccgggttca ttttcagttg aggccaaagt 180
ccccgcgggt tggtcggggc ggggcggggc tcggggggac ggggctgacc cgggggccgg 240
ggccag 246

<210> 369
<211> 245
<212> DNA
<213> Homo sapiens

<400> 369
gtgagtgacc ccggccccggg ggcgaggtca cgactcccca tccccacgg acggccccggg 60
tgcgccccgag tctccgggtc cgagatccgc ctccctgagg ccgcggggacc cgcccagacc 120
ctcgaccggc gagagcccca ggcgcggttta cccgggttca ttttcagtkg aggccagaat 180
ccccgcgggt tggtcggggc ggggcggggc tcggggggac gggctgaccg cgggggccggg 240
gccag 245

<210> 370
<211> 245
<212> DNA
<213> Homo sapiens

<400> 370
gtgagtgacc ccggcctggg ggcgaggtca cgactcccca tccccacgt acggccccggg 60
tgcgccccgag tctccgggtc cgagatccgc cccctgagg ccgcggggacc cgccccaaacc 120
ctcgaccggc gagagcccca ggcgcggttta cccgggttca ttttcagttg aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcggggggac gggctgaccg cggggcctgg 240
gccag 245

<210> 371
<211> 245
<212> DNA
<213> Homo sapiens

<400> 371
gtgagtgacc ccggcctggg ggcgaggtca cgactcccca tccccacgt acggccccggg 60
tgcgccccgag tctccgggtc cgagatccgc cccctgagg ccgcggggacc cgccccaaacc 120
ctcgaccggc gagagcccca ggcgcggttta cccgggttca ttttcagttg aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcggggggac gggctgaccg cggggcctgg 240
gccag 245

<210> 372
<211> 245
<212> DNA
<213> Homo sapiens

<400> 372
gtgagtgacc ccggcctggg ggcgaggtca cgactcccca tccccacgt acggccccggg 60
tgcgccccgag tctccgggtc cgagatccgc cccctgagg ccgcggggacc cgccccaaacc 120
ctcgaccggc gagagcccca ggcgcggttta cccgggttca ttttcagttg aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcggggggac gggctgaccg cggggcctgg 240
gccag 245

<210> 373
<211> 245
<212> DNA

<213> Homo sapiens

<400> 373

```
gtgagtgacc ccggcccggg ggcaggtca cgactccca tccccacgt acggcccga 60
tcgcccagag tctcgggtc cgagatccg cccctgagg ccgcgggacc cgcccaaac 120
ctcgaccggc gagagccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcgggggacg gggctgaccg cggggcctgg 240
gccag 245
```

<210> 374

<211> 245

<212> DNA

<213> Homo sapiens

<400> 374

```
gtgagtgacc ccggcccggg ggcaggtca cgactccca tccccacgt acggcccggg 60
tcgcccagag tctcgggtc cgagatccg cccctgagg ccgcgggacc cgcccagacc 120
ctcgaccggc gagagccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcgggggact gggctgatcg cggggccggg 240
gccag 245
```

<210> 375

<211> 245

<212> DNA

<213> Homo sapiens

<400> 375

```
gtgagtgacc ccggcccggg ggcaggtca cgactccca tccccacgt acggcccggg 60
tcgcccagag gtctcgggt ccgagatccg cctcctgag gccgcgggac ccgcccagac 120
cctcgaccgg cgagagcccc aggcgcgttt acccggtttc attttcagtt gaggccaaaa 180
tccccgcggg ttggtcgggr cgggcggggc ctcgggggac tgggctgacc gcgggaccgg 240
gccag 245
```

<210> 376

<211> 243

<212> DNA

<213> Homo sapiens

<400> 376

```
gtgagtgacc ccggcccggg ggcaggtca cgactccca tccccacgt acggcccggg 60
tcgcccagag ctccgggtc cgagatcac cctccstgag gccgcgggac ccgcccagac 120
cctcgaccgg cgagagcccc aggcgcgttt acccggtttc attttcagtt gaggccaaaa 180
tccccgcggg ttggtcgggg cgggcgggct cgggggacgg ggctgaccgc gggccggggc 240
cag 243
```

<210> 377

<211> 241

<212> DNA

<213> Homo sapiens

<400> 377

```
gtgaccccg cccggggcgc aggtcacgac tccccatccc ccacgtacgg cccgggtcgc 60
cccagagtct cgggtccgag atccgcctcc ctgaggccgc gggaccgcc cagaccctcg 120
accggcgaga gcccaaggcg cgtttaccgg gtttcatttt cagttgaggg caaaatcccc 180
gcggttggt cggggcgggg cggggctcgg gggacggtgc tgaccgcggg gccggggcaa 240
g 241
```

<210> 378
<211> 246
<212> DNA
<213> Homo sapiens

<400> 378
gtgagtgacc tcggcccggg ggcaggtca cgactcccca tccccacgg acggcccggg 60
tcgccccgag tctccgggtc cgagatccgc ctccctgagg ccgcgggacc cggccagacc 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
ccccgcgggt tgggcggggc ggggcggggc tcggggggac tgggctgacc gcgggggcgg 240
ggccag 246

<210> 379
<211> 244
<212> DNA
<213> Homo sapiens

<400> 379
gtgagtgacc ccggcccggg ggcaggtca cgactcccca tccccacgt acggcccggg 60
tcgccccgag tctccgggtc cgagatccgc cccgaaggc ccgcgggacc cggcagaacc 120
ctgaccggcg agagccccag cgcgtttacc cggtttcatt ttcagttgag gccaaaatcc 180
ccgcggggtt gtcggggcgg ggcgggggtc ggggggacgg ggctgaccgc ggggcggggg 240
ccaa 244

<210> 380
<211> 245
<212> DNA
<213> Homo sapiens

<400> 380
gtgagtgacc ccggcccggg ggcaggtca cgactcccca tccccacgg acggcccggg 60
tcgccccgag tcttcgggtc ccagatccgc ttccttgagg ccgcgggacc gccagacct 120
tcgaccggcg agagccccag ggcggtttac cgggtttcat tttcagttga ggcaaaatcc 180
cccgcgggtt ggtcggggcg gggcggggtc cggggggact gggctgaccg cgggggcggg 240
ccagg 245

<210> 381
<211> 239
<212> DNA
<213> Homo sapiens

<400> 381
gtgagtgacc ccggcccggg ggcaggtca cgactcccca tccccacgta cggcccgggt 60
cgcccagagt ccgggtccga gatccacccc cctgaggccg ctgggaccgc cccagacct 120
cgaccggcga gagccccagg cgcgtttacc cggtttcatt ttcagttgag accaaaatcc 180
ccgcggggtt gtcagggcgg gacgggggtc ggggacgggg ctgaccgggg ccgggccag 239

<210> 382
<211> 244
<212> DNA
<213> Homo sapiens

<400> 382
gtgagtgacc ccggcctggg ggcaggtca cgaccctcc ccaacccga cgtacggccc 60
gggtctcctc gagtctctag gtccgagatc cgccccaagg ccgcgggacc cggccagaac 120
ctcgaccgca gagagcccca ggcgacttta cccggtttca ttttcagttg aggtcaaat 180

ccccgcgggt tggtcggggc ggggcggggc tcgggggact ggctgaccgc gagggctggg 240
ccag 244

<210> 383
<211> 246
<212> DNA
<213> Homo sapiens

<400> 383
gtgagtgacc ccggcccggg ggcgaggtca cgacccctcc ccatccccc cggacggccc 60
gggtcgcccc gagtctcccc gtctgagatc caccgcgagg ctgcggaacc cgcccagacc 120
ctcgaccgga gagagcccca gtcaccttta cccggtttca ttttcagttt aggcctaaat 180
ccccgcgggt tggtcggggc tggggcgggg ctcgggggac ggggctgacc acggggggcg 240
ggccag 246

<210> 384
<211> 246
<212> DNA
<213> Homo sapiens

<400> 384
gtgagtgacc ccggcccggg ggcgaggtca cgacccctcc ccatccccc cggacggccc 60
gggtcgcccc gagtctcccc gtctgagatc caccgcgagg ctgcggaacc cgcccagacc 120
ctcgaccgga gagagcccca gtcaccttta cccggtttca ttttcagttt aggcctaaat 180
ccccgcgggt tggtcggggc tggggcgggg ctcgggggac ggggctgacc acggggggcg 240
ggccag 246

<210> 385
<211> 246
<212> DNA
<213> Homo sapiens

<400> 385
gtgagtgacc ccggcccggg ggcgaggtca cgacccctcc ccatccccc cggacggccc 60
gggtcgcccc gagtctcccc gtctgagatc caccgcgagg ctgcggaacc cgcccagacc 120
ctcgaccgga gagagcccca gtcaccttta cccggtttca ttttcagttt aggcctaaat 180
ccccgcgggt tggtcggggc tggggcgggg ctcgggggac ggggctgacc acggggggcg 240
ggccag 246

<210> 386
<211> 246
<212> DNA
<213> Homo sapiens

<400> 386
gtgagtgacc ccggcccggg ggcgaggtca cgacccctcc ccatccccc cggacggccc 60
gggtcgcccc gagtctcccc gtctgagatc caccgcgagg ctgcggaacc cgcccagacc 120
ctcgaccgga gagagcccca gtcaccttta cccggtttca ttttcagttt aggcctaaat 180
ccccgcgggt tggtcggggc tggggcgggg ctcgggggac ggggctgacc acggggggcg 240
ggccag 246

<210> 387
<211> 246
<212> DNA
<213> Homo sapiens

<400> 387

```
gtgagtgacc ccggccccggg ggcaggtca cgacccctcc ccatccccca cggacggccc 60
gggtcgcccc gagtctcccg gtctgagatc caccgagagg ttgcggaacc cgcccagacc 120
ctcgaccgga gagagcccca gtcaccttta cccggtttca ttttcagttt aggccaaaat 180
ccccgcgggt tggtcggggc tggggcgggg ctcgggggac ggggctgacc acgggggcgg 240
ggccag 246
```

<210> 388

<211> 246

<212> DNA

<213> Homo sapiens

<400> 388

```
gtgagtgacc ccggccccggg ggcaggtca cgacccctcc ccatccccca cggacggccc 60
gggtcgcccc gagtctcccg gtctgagatc caccgagagg ctgcggaacc cgcccagacc 120
ctcgaccgga gagagcccca gtcaccttta cccggtttca ttttcagttt aggccaaaat 180
ccccgcgggt tggtcggggc tggggcgggg ctcgggggac ggggctgacc acgggggcgg 240
ggccag 246
```

<210> 389

<211> 245

<212> DNA

<213> Homo sapiens

<400> 389

```
gtgagtgacc ccggccccggg ggcaggtca cgacccctcc ccatccccca cggacggccc 60
gggtcgcccc gagtctcccg gtctgagatc caccgagagg ctgcggaacc cgcccagacc 120
ctcgaccgga gagagcccca gtcaccttta cccggtttca ttttcagttt aggccaaaat 180
ccccgcgggt tggtcggggc tggggcgggg ctcgggggac gggctgacca cgggggcggg 240
gccag 245
```

<210> 390

<211> 245

<212> DNA

<213> Homo sapiens

<400> 390

```
gtgagtgacc ccggccccggg ggcaggtca cgacccctcc tcatccccca cggacggccc 60
gggtcgcccc aagtctcccg gtctgagatc caccgagagg ctgcggaacc cgcccagacc 120
ctcgaccgga gagagcccca gtcaccttta cccggtttca ttttcagttt aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcgggggacg gggctgaccg cgggggcggg 240
gccag 245
```

<210> 391

<211> 245

<212> DNA

<213> Homo sapiens

<400> 391

```
gtgagtgacc ccggccccggg ggcaggtca cgacccctcc tcatccccca cggacggccc 60
gggtcgcccc aagtctcccg gtctgagatc caccgagagg ctgcggaacc cgcccagacc 120
ctcgaccgga gagagcccca gtcaccttta cccggtttca ttttcagttt aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcgggggacg gggctgaccg cgggggcggg 240
gccag 245
```

<210> 392

<211> 246
<212> DNA
<213> Homo sapiens

<400> 392
gtgagtgacc ccggcccggg ggcgagggtca cgacccctcc tcatccccca cggacggccc 60
gggtcgcccc aagtctcccg gtctgagatc caccocgagg ctgcggaacc cgcccagacc 120
ctcgaccgga gagagcccca gtcaccttta cccggtttca ttttcagttt aggccaaaat 180
ccccgcgggt tggtcgggac tggggcgggg ctcgggggac ggggctgacc acgggggcg 240
ggccag 246

<210> 393
<211> 246
<212> DNA
<213> Homo sapiens

<400> 393
gtgagtgacc ccagcccggg ggcgagggtca cgacccctcc ccataccccca cggacggccc 60
gggtcgcccc gagtctcccg gtctgagatc ctccccgagg ctgcggaacc cgcccagacc 120
ctcgaccgga gagagcccta gtcgccttta cccggtttca ttttcagttt aggccaaaat 180
ccccgcgggt tggtcggggc tggggcgggg ctcgggggac ggggctgacc acgggggcg 240
ggccag 246

<210> 394
<211> 250
<212> DNA
<213> Homo sapiens

<400> 394
gtgagtgacc ccggcccggg ggcgagggtca cgacccctcc ccataccccca cggacggccc 60
gggtcgcccc gagtctcccg gtctgagatc caccocgagg tggatctgcg gaaccogccc 120
agaccctcga ccggagagag ccccagtcgc ctttaccggt tttcattttc ggtttaggcc 180
aaaatccccg cgggttggtc ggggcggggc ggggctcggt ggaactgggt gaccgcgggg 240
gcggggccag 250

<210> 395
<211> 245
<212> DNA
<213> Homo sapiens

<400> 395
gtgagtgacc ccggcccggg ggcgagggtca cgacccctcc ccataccccca cggacggccc 60
gggtcgcccc gagtctcccg gtctgagatc caccocgagg ctgcggaacc cgcccagacc 120
ctcgcccgga gagagcccca gtcaccttta cccggtttca ttttcagttt aggccaaaat 180
ccccgcgggt tggtcggggc tggggcgggg ctcgcgagcg gtgttgacca cgggggcggc 240
gccag 245

<210> 396
<211> 600
<212> DNA
<213> Homo sapiens

<400> 396
gtaccagggg ccacggggcg cctccctgat cgccctgtaga tctcccgggc tggcctccca 60
caaggagggg agacaattgg gaccaacact agaatatcgc cctccctctg gtccctgagg 120
agaggaatcc tcttggttt ccagatcctg taccagagag tgactctgag gtccgcct 180
gctctctgac acaattaagg gataaaatct ctgaaggaat gacgggaaga cgatccctcg 240

```
aatactgatg agtgggttccc tttgacacac accggcagca gccttggggc cgtgactttt 300
cctctcaggc cttgtttctct gcttcacact caatgtgtgt ggggggtctga gtccagcact 360
tctgagtccc tcagcctcca ctcagggtcag gaccagaagt cgctgttccc tcttcaggga 420
ctagaatttt ccacggaata ggagattatc ccagggtgct gtgtccaggc tgggtgtctgg 480
gttctgtgct ccttcccca tcccagggtgt cctgtccatt ctcaagatag ccacatgtgt 540
gctggaggag tgtcccatga cagatgcaaa atgcctgaat gttctgactc ttcctgacag 600
```

<210> 397
<211> 600
<212> DNA
<213> Homo sapiens

```
<400> 397
gtaccagggg ccacagggcg cctccctgat cgctgtaga tctcccgggc tggcctccca 60
caaggagggg agacaattgg gaccaacact agaatatcgc cctccctctg gtccctgaggg 120
agaggaatcc tcctggggtt ccagatcctg taccagagag tgactctgag gttccgccct 180
gctctctgac acaattaagg gataaaatct ctgaaggaat gacgggaaga cgatccctcg 240
aatactgatg agtgggttccc tttgacacac accggcagca gccttggggc cgtgactttt 300
cctctcaggc cttgtttctct gcttcacact caatgtgtgt ggggggtctga gtccagcact 360
tctgagtccc tcagcctcca ctcagggtcag gaccagaagt cgctgttccc tcttcaggga 420
ctagaatttt ccacggaata ggagattatc ccagggtgct gtgtccaggc tgggtgtctgg 480
gttctgtgct ccttcccca tcccagggtgt cctgtccatt ctcaagatag ccacatgtgt 540
gctggaggag tgtcccatga cagatgcaaa atgcctgaat gttctgactc ttcctgacag 600
```

<210> 398
<211> 600
<212> DNA
<213> Homo sapiens

```
<400> 398
gtaccagggg ccacggggcg cctccctgat cgctgtaga tctcccgggc tggcctccca 60
caaggagggg agacaattgg gaccaacact agaatatcgc cctccctctg gtccctgaggg 120
agaggaatcc tcctggggtt ccagatcctg taccagagag tgactctgag gttccgccct 180
gctctctgac acaattaagg gataaaatct ctgaaggaat gacgggaaga cgatccctcg 240
aatactgatg agtgggttccc tttgacacac accggcagca gccttggggc cgtgactttt 300
cctctcaggc cttgtttctct gcttcacact caatgtgtgt ggggggtctga gtccagcact 360
tctgagtccc tcagcctcca ctcagggtcag gaccagaagt cgctgttccc tcttcaggga 420
ctagaatttt ccacggaata ggagattatc ccagggtgct gtgtccaggc tgggtgtctgg 480
gttctgtgct ccttcccca tcccagggtgt cctgtccatt ctcaagatag ccacatgtgt 540
gctggaggag tgtcccatga cagatgcaaa atgcctgaat gatctgactc ttcctgacag 600
```

<210> 399
<211> 599
<212> DNA
<213> Homo sapiens

```
<400> 399
gtaccagggg ccacggggcg cctccctgat cgctgtaga tctcccgggc tggcctccca 60
caaggagggg agacaattgg gaccaacact agaatatcgc cctccctctg gtccctgaggg 120
agaggaatcc tcctggggtt ccagatcctg taccagagag tgactctgag gttccgccct 180
gctctctgac acaattaagg gataaaatct ctgaaggaat gacgggaaga cgatccctcg 240
aatactgatg agtgggttccc tttgacacac accggcagca gccttggggc cgtgactttt 300
cctctcaggc cttgtttctct gcttcacact caatgtgtgt ggggggtctga gtccagcact 360
tctgagtccc tcagcctcca ctcagggtcag gaccagaagt cgctgttccc tcttcaggga 420
ctagaatttc cacggaatag gagattatcc cagggtgctg tgtccaggct ggtgtctggg 480
ttctgtgctc ccttccccat cccagggtgtg ctgtccattc tcaagatagc cacatgtgtg 540
ctggaggagt gtcccatgac agatacccaa tgccctgatg ttctgactct tccctgacag 599
```

<210> 400
<211> 577
<212> DNA
<213> Homo sapiens

<400> 400
gtaccagggg ccacgggagcg cctccctgat cgccctgtaga tctcccgggc tggcctccca 60
caaggagggg agacatttgg gaccaacact agaatatcac cctccctctg gtcctgaggg 120
agaggactcc tcctgggttc cagatcctgt accagagagt gactctgagg ttccgacctg 180
ctctctgaca caattaaggg ataaaaatctc tgaaggagtg acgggaagac gatccctcga 240
atactgatga gtggttcctt ttgacaccgg cagcagcctt gggcccgtga cttttcctct 300
caggccttgt tctctgcttc aactcaatg tgtgtggggg tctgagtcca gcacttctga 360
gtccctcagc ctccactcag gtcaggacca gaagtcgctg ttcccttctc agggatagaa 420
gattatccca ggtgcctgtg tccaggctgg tgtctgggtt ctgtgctctc tttcccatcc 480
cgggtgtcct gtccattctc aagatgggca catgcgtgct ggtggagtgt cccatgacag 540
atgcaaaatg cctgaatttt ctgactcttc ccgtcag 577

<210> 401
<211> 579
<212> DNA
<213> Homo sapiens

<400> 401
gtaccagggg ccacggggcg cctacctgat cgccctgtagg tctcccgggc tggcctccca 60
caaggagggg agacaattgg gaccaacact agaatatcgc cctccctctg gtcctgaggg 120
agaggaatcc tcctgggttt ccagatcctg taccagagag tgactctgag gttccgacct 180
gctctctgac acaattaagg gataaaatct ctgacggaat gacggaaaga cgatccctcg 240
aatactgatg actggttccc ttgacaccg gcagcagcct tgggaccgtg acttttctc 300
tcaggccttg ttctctgctt cactcaat gtgtgtgggg gtctgagtcc agcacttctg 360
agtccctcag cctccactca ggtcaggacc agaagtcgct gttccctcct cagggaatag 420
aagattatcc caggtgcctg tgtccaggct ggtgtctggg ttctgtgctc ttttcccat 480
cccgggtgtc ctgtccattc tcaagatggc cacatgcatg ctggtggagt gtcccatgac 540
agatgcaaaa tgctgaatt ttctgactct tcccgctcag 579

<210> 402
<211> 579
<212> DNA
<213> Homo sapiens

<400> 402
gtaccagggg ccacggggcg cctccctgat cgccctgtaga tctcccgggc tggcctccca 60
caaggagggg agacaattgg gaccaacact agaatatcgc cctccctctg gtcctgaggg 120
agaggaatcc tcctgggttt ccagatcctg taccagagag tgactctgag gttccgacct 180
gctctctgac acaattaagg gataaaatct ctgaaggagt gacgggaaga cgatccctcg 240
aatactgatg agtgggtccc ttgacaccg gcagcagcct tgggcccgtg acttttctc 300
tcaggccttg ttctctgctt cactcaat gtgtgtgggg gtctgagtcc agcacttctg 360
agtctctcag cctccactca ggtcaggacc agaagtcgct gttcccttct cagggaatag 420
aagattatcc caggtgcctg tgtccaggct ggtgtctggg ttctgtgctc ttttcccat 480
cccgggtgtc ctgtccattc tcaagatggc cacatgctg ctggaggagt gtcccatgac 540
agatgcaaaa tgctgaatg ttctgactct tccgtcag 579

<210> 403
<211> 579
<212> DNA
<213> Homo sapiens

<400> 403

gtaccagggg	ccacggggcg	cctccctgat	cgccctgtaga	tctcccgggc	tggcctccca	60
caaggagggg	agacaattgg	gaccaacact	agaatatcac	cctccctctg	gtcctgaggg	120
agaggaaatcc	tcctggggtt	ccagatcctg	taccagagag	tgactctgag	gttccgcctt	180
gctctctgac	tcaattaagg	gataaaatct	ctgaaggagt	gacgggaaga	cgatccctcg	240
aatactgatg	agtgggtccc	tttgacaccg	gcaggagcct	tgggcccgtg	acttttcttc	300
tcaggccttg	ttctctgctt	cacactcaat	gtgtgtgggg	gtctgagtcc	agcacttctg	360
agtccctcag	cctccactca	ggtcaggacc	agaagtcgct	gttcccttct	caggggaatag	420
aagattatcc	caggtgcctg	tgtccaggct	gggtgtctggg	ttctgtgctc	tcttccccat	480
cccgggtgtc	ctgtccattc	tcaagatggc	cacatgcgtg	ctgggtggagt	gtcccatgac	540
agatgcaaaa	tgctgaattt	ttctgactct	tcccgtcag			579

<210> 404

<211> 574

<212> DNA

<213> Homo sapiens

<400> 404

gtaccagggg	cagtggggag	ccttcccat	ctcctatagg	tgcgccggga	tggcctccca	60
cgagaagagg	aggaaaatgg	gatcagcgct	agaatgtcgc	cctcccttga	atggagaatg	120
gcatgagttt	tcctgagttt	ccctctgagg	ccccctcttc	tctctaggac	aattaaggga	180
tgacgtctct	gaggaaaatg	aggggaagac	agtccctaga	atactgatca	ggggtccctt	240
ttgacccctg	cagcagcctt	gggaaccgtg	actttctctt	caggccttgt	tctctgcctc	300
acactcagtg	tgtttggggc	tctgattcca	gcacttctga	gtcactttac	ctccactcag	360
atcgggagca	gaagtcctgt	ttcccgcctc	agagactcga	actttccaat	gaataggaga	420
ttatcccagg	tgctgcgtc	caggctggtg	tctgggttct	gtgccccttc	cccacccag	480
gtgtcctgtc	cattctcagg	ctggtcacat	gggtggtcct	aggggtgtccc	atgagagatg	540
caaagcgcct	gaattttctg	actcttccca	tcag			574

<210> 405

<211> 600

<212> DNA

<213> Homo sapiens

<400> 405

gtaccagggg	ccacagggcg	cctccctgat	cgccctgtaga	tctcccgggc	tggcctccca	60
caaggagggg	agacaattgg	gaccaacact	agaatatcac	cctccctctg	gtcctgaggg	120
agaggaaatcc	tcctggggtt	ccagatcctg	taccagagag	tgactctgag	gttccgcctt	180
gctctgtgac	acaattaagg	gataaaatct	ctgaaggagt	gacgggaaga	cgatccctcg	240
aatactgatg	agtgggtccc	tttgacacac	accggcagca	gccttggggc	cgtgactttt	300
cctctcaggc	cttggttctct	gcttcacact	caatgtgtgt	gggggtctga	gtccagcact	360
tctgagtccc	tcagcctcca	ctcaggtcag	gaccagaagt	cgctgttccc	tcttcaggga	420
ctagaatttt	ccacggaata	ggagattatc	ccaggtgcct	gtgtccaggc	tgggtgtctgg	480
gttctgtgct	cccttcccca	tcccagggtg	cctgtccatt	ctcaagatag	ccacatgtgt	540
gctggaggag	tgtcccatta	cagatgccaa	atgcctgaat	gttctgactc	ttcctgacag	600

<210> 406

<211> 600

<212> DNA

<213> Homo sapiens

<400> 406

gtaccagggg	ccacagggcg	cctccctgat	cgccctgtaga	tctcccgggc	tggcctccca	60
caaggagggg	agacaattgg	gaccaacact	agaatatcac	cctccctctg	gtcctgaggg	120
agaggaaatcc	tcctggggtt	ccagatcctg	taccagagag	tgactctgag	gttccgcctt	180
gctctgtgac	acaattaagg	gataaaatct	ctgaaggagt	gacgggaaga	cgatccctcg	240
aatactgatg	agtgggtccc	tttgacacac	accggcagca	gccttggggc	cgtgactttt	300
cctctcaggc	cttggttctct	gcttcacact	caatgtgtgt	gggggtctga	gtccagcact	360
tctgagtccc	tcagcctcca	ctcaggtcag	gaccagaagt	cgctgttccc	tcttcaggga	420

ctagaatttt ccacggaata ggagattatc ccagggtgcct gtgtccaggc tgggtgtctgg 480
gttctgtgct ccttcccca tcccagggtgt cctgtccatt ctcaagatag ccacatgtgt 540
gctggaggag tgtcccatta cagatgccaa atgcctgaat gttctgactc ttctgacag 600

<210> 407

<211> 600

<212> DNA

<213> Homo sapiens

<400> 407

gtaccagggg ccacggggcg cctccctgat cgctctaga tctcccgggc tggcctccca 60
caaggagggg agacaattgg gaccaacact agaatatcg cctccctctg gtcctgaggg 120
agaggaatcc tcttggtttt ccagatcctg taccagagag tgactctgag gttccgcctt 180
gctctctgac acaattaagg gataaaatct ctgaaggaaat gacgggaaga cgatccctcg 240
aatactgatg agtggttccc ttgacacac accggcagca gccttggggc cgtgactttt 300
cctctcaggg cttgttctct gcttcacact caatgtgtgt gggggtctga gtccagcact 360
tctgagtcct tcagcctcca ctccaggtcag gaccagaagt cgctgttccc tcttcaggga 420
ctagaatttt ccacggaata ggagattatc ccagggtgcct gtgtccaggc tgggtgtctgg 480
gttctgtgct ccttcccca tcccagggtgt cctgtccatt ctcaagatag ccacatgtgt 540
gctggaggag tgtcccatta cagatgcaaa atgcctgaat gttctgactc ttctgacag 600

<210> 408

<211> 575

<212> DNA

<213> Homo sapiens

<400> 408

gtaccagggg cagtggggag ccttcccat ctctatagg tcgcccggga tggcctccca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt tctgagttt cctctgaggg cccctcttc tctctaggac aattaaggga 180
tgacgtctct gaggaaatgg aggggaagac agtccctaga atactgatca ggggtcctct 240
ttgacccttg cagcagcctt gggaaccgtg acttttctc tcagaccttg ttctctgcct 300
cacactcagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
gatcaggagc agaagtcctt gttccccgct cagagactcg aactttccaa tgaataggag 420
attatcccag gtgcctgcgt ccaggctggg gtctgggttc tgtgcccctt cccacccca 480
gggtgtcctgt ccattctcag tctggtcaca tgggtgtgct tagggtgtcc catgagagat 540
gccaaagcgcc tgaaatttct gactcttccc atcag 575

<210> 409

<211> 575

<212> DNA

<213> Homo sapiens

<400> 409

gtaccagggg cagtggggag ccttcccat ctctatagg tcgcccggga tggcctccca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt tctgagttt cctctgaggg cccctcttc tctctaggac aattaaggga 180
tgacgtctct gaggaaatgg aggggaagac agtccctagg atagtgatca ggggtcccct 240
ttgacccttg cagcagcctt gggaaccgtg acttttctc tcaggccttg ttctctgcct 300
cacactcagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
gatcaggagc agaagtcctt gttccccgct cagagactcg aactttccaa tgaataggag 420
attatcccag gtgcctgcgt ccaggctggg gtctgggttc tgtgcccctt cccacccca 480
gggtgtcctgt ccattctcag gctggtcaca tgggtgtgct tagggtgtcc catgagagat 540
gcaaagcgcc tgaaatttct gactcttccc atcag 575

<210> 410

<211> 574

<212> DNA

<213> Homo sapiens

<400> 410

```

gtaccagggg cagtggggag ccttccccat ctctatatagg tcgcggggga tggcctccca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt tcttgagttt cctctgaggg cccctcttct tctctaggac aattaaggga 180
tgacgtctct gaggaatgg aggggaagac agtccctaga atactgatca ggggtcccct 240
ttgacccttg cagcagcctt gggaaccgtg actttctctc caggccttgt tctctgcctc 300
acactcagtg tgtttggggc tctgattcca gcaattctga gtcactttac ctccactcag 360
atcgggagca gaagtccctg ttccccgctc agagactcga actttccaat gaataggaga 420
ttatcccagg tgctgcgtc caggctgggtg tctgggttct gtgccccttc cccacccca 480
gtgtcctgtc cattctcagg ctggtcacat gggtgtcctc aggggtgtcc atgagagatg 540
caaaagcgct gaattttctg actcttccca tcag 575

```

<210> 411

<211> 575

<212> DNA

<213> Homo sapiens

<400> 411

```

gtaccagggg cagtggggag ccttccccat ctctatatagg tcggcgggga tggcctccca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt tcttgagttt cctctgaggg cccctcttct tctctaggac aattaaggga 180
tgacgtctct gaggaatgg aggggaagtc agtccctaga atactgatca ggggtcccct 240
ttgacccttg cagcagcctt gggaaccgtg acttttctct tcaggccttg ttctctgcct 300
cacactcagt gtgtttgggg ctctgattcc agcaattctg agtcacttta cctccactca 360
gatcaggagc agaagtccct gtccccgctc cagagactcg aactttccaa tgaataggag 420
attatcccag gtgcctgcgt ccaggctgggt gtctgggttc tgtgcccctt cccacccca 480
gggtgtcctgt ccattctcag gctggtcaca tgggtgttcc taggggtgtcc catgagagat 540
gcaaagcgcc tgtattttct gactcttccc atcag 575

```

<210> 412

<211> 575

<212> DNA

<213> Homo sapiens

<400> 412

```

gtaccagggg cagtggggag ccttccccat ctctatatagg tcggcgggga tggcctccca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt tcttgagttt cctctgaggg cccctcttct tctctaggac aattaaggga 180
tgacgtctct gaggaatgt aggggaagac agtccctaga atactgatca ggggtcccct 240
ttgacccttg cagcagcctt gggaaccgtg acttttctct tcaggccttg ttctctgcct 300
cacactcagt gtgtttgggg ctctgattcc agcaattctg agtcacttta cctccactca 360
gatcaggagc agaagtccct gtccccgctc cagagactcg aactttccaa tgaataggag 420
attatcccag gtgcctgcgt ccaggctgggt gtctgggttc tgtgcccctt cccacccca 480
gggtgtcctgt ccattctcag gctggtcaca tgggtgttcc taggggtgtcc catgagagat 540
gcaaagcgcc tgaattttct gactcttccc atcag 575

```

<210> 413

<211> 572

<212> DNA

<213> Homo sapiens

<400> 413

```

gtaccagggg cagtggggag cctcccccat ctctatatagg tcgcggggga tggcctccca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt tcttgagttt cctctgaggg cccctcttct tctctagaca attaaggga 180

```

```
gacgtctctg aggaaatgga ggggaagaca gtccctagaa tactgatcag ggggtcccctt 240
tgacccctgc agcagccttg ggaaccgtga cttttcctct caggccttgt tctctgcctc 300
acactcagtg tgtttggggc tctgattcca gcacttctga gtcactttac ctccactcag 360
atcaggagca gaagtccctg ttcccgcctc agagactcga actttccaat gaataggaga 420
ttatcccagg tgccctgcctc cgctgggtgc tgggttctgt gccccttccc caccaccagg 480
gtcctgtcca ttctcaggct ggtcacatgg gtggtcctag ggtgtgccat gagagatgca 540
aagcgccctga attttctgac tcttcccatc ag 572
```

<210> 414

<211> 572

<212> DNA

<213> Homo sapiens

<400> 414

```
gtaccagggg cagtggggag ccttccccat ctccctatagg tcgccgggga tggcctccca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt tcctgagttt cctctgaggg cccctcttct tctctagaca attaagggat 180
gacgtctctg aggaaatgga ggggaagaca gtccctagaa tactgatcag ggggtcccctt 240
tgacccctgc agcagccttg ggaaccgtga cttttcctct caggccttgt tctctgcctc 300
acactcagtg tgtttggggc tctgattcca gcacttctga gtcactttac ctccactcag 360
atcaggagca gaagtccctg ttcccgcctc agagactcga actttccaat gaataggaga 420
ttatcccagg tgccctgcctc cgctgggtgc tgggttctgt gccccttccc caccaccagg 480
gtcctgtcca ttctcaggct ggtcacatgg gtggtcctag ggtgtgccat gagagatgca 540
aagcgccctga attttctgac tcttcccatc ag 572
```

<210> 415

<211> 575

<212> DNA

<213> Homo sapiens

<400> 415

```
gtaccagggg cagtggggag ccttccccat ctccctatagg tcgccgggga tggcctccca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt tcctgagttt cctctgaggg cccctcttct tctctaggac aattaaggga 180
tgacgtctct gaggaaatgg aggggaagac agtccctaga atactgatca ggggtcccct 240
ttgacccctg cagcagcctt ggggaaccgtg acttttctct tcaggccttg ttctctgcct 300
cacactcagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
gatcaggagc agaagtccct gttccccgct cagagactcg aactttccaa tgaataggag 420
attatcccag gtgcctgcgt ccaggctggg gtctgggttc tgtgcccctt cccacacca 480
gggtgtcctgt ccattctcag gctggtcaca tgggtgggtc tagggtgtcc catgagagat 540
gcaaagcgcc tgaattttct gactcttccc atcag 575
```

<210> 416

<211> 575

<212> DNA

<213> Homo sapiens

<400> 416

```
gtaccagggg cagtggggag ccttccccat ctccctatagg tcgccgggga tggcctccca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt tcctgagttt cctctgaggg cccctcttct tctctaggac aattaaggga 180
tgacgtctct gaggaaatgg aggggaagac agtccctaga atactgatca ggggtcccct 240
ttgacccctg cagcagcctt ggggaaccgtg acttttctct tcaggccttg ttctctgcct 300
cacactcagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
gatcaggagc agaagtccct gttccccgct cagagactcg aactttccaa tgaataggag 420
attatcccag gtgcctgcgt ccaggctggg gtctgggttc tgtgcccctt cccacacca 480
gggtgtcctgt ccattctcag gctggtcaca tgggtgggtc tagggtgtcc catgagagat 540
gcaaagcgcc tgaattttct gactcttccc atcag 575
```

<210> 417
<211> 575
<212> DNA
<213> Homo sapiens

<400> 417
gtaccagggg cagtggggag ccttccccat ctctataggg tcgcccgggga tggcctccca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt tcttgagttt cctctgaggg cccctcttc tctctaggac aattaaggga 180
tgacgtctct gaggaatgg aggggaagac agtccctaga atactgatca ggggtccct 240
ttgacccctg cagcagcctt gggaaccgtg acttttctc tcaggccttg ttctctgct 300
cacactcagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
gatcaggagc agaagtccct gttccccgct cagagactcg aactttccaa tgaataggag 420
attatcccag gtgcctgcgt ccaggctggg gtctgggttc tgtgcccctt cccacacca 480
gggtgctctg ccattctcag gctggtcaca tgggtggtcc tagggtgtcc catgagagat 540
gcaaagcgcc tgaattttct gactcttccc atcag 575

<210> 418
<211> 575
<212> DNA
<213> Homo sapiens

<400> 418
gtaccagggg cagtggggag ccttccccat ctctataggg tcgcccgggga tggcctccca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt tcttgagttt cctctgaggg cccctcttc tctctaggac aattaaggga 180
tgacgtctct gaggaatgg aggggaagac agtccctaga atactgatca ggggtccct 240
ttgacccctg cagcagcctt gggaaccgtg acttttctc tcaggccttg ttctctgct 300
cacactcagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
gatcaggagc agaagtccct gttccccgct cagagactcg aactttccaa tgaataggag 420
attatcccag gtgcctgcgt ccaggctggg gtctgggttc tgtgcccctt cccacacca 480
gggtgctctg ccattctcag gctggtcaca tgggtggtcc tagggtgtcc catgagagat 540
gcaaagcgcc tgaattttct gactcttccc atcag 575

<210> 419
<211> 572
<212> DNA
<213> Homo sapiens

<400> 419
gtaccagggg cagtggggag ccttccccat ctctataggg tcgcccgggga tggcctccca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt tcttgagttt cctctgaggg cccctcttc tctctaggac aattaaggga 180
tgacgtctct gaggaatgg aggggaagac agtccctaga atactgatca ggggtccct 240
ttgacccctg cagcagcctt gggaaccgtg acttttctc tcaggccttg ttctctgct 300
cacactcagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
gatcaggagc agaagtctct gttccccgct cagagactcg aactttccaa tgaatagatt 420
atcccagggt cctgcgtcca ggctgggtgc tgggttctgt gccccttccc cccccagggt 480
gtcctgtcca ttctcagggt ggtcacatgg tgggtcctag ggtgtcccat gagagatgca 540
aagcgcctga attttctgac tcttcccatc ag 572

<210> 420
<211> 571
<212> DNA
<213> Homo sapiens

<400> 420

```
gtaccagggg cagtggggag ccttcccat ctctatagg tcgccgggga tggcctccca 60
cgagaagagg aggaaaatgg gatcagcgct agaagtgcgc cctcccttga atggagaatg 120
gcatgagttt tcctgagttt cctctgaggg cccctcttc tctctaggac aattaaggga 180
tgacgtctct gaggaaatgg aggggaagac agtccctaga atactgatca ggggtccct 240
ttgacccctg cagcagcctt gggaaccatg acttttctc tcaggccttg tctctgcctc 300
acactcagtg tgtttggggc tctgattcca gcacttctga gtcactttac ctccactcag 360
atcaggagca gaagtctctg ttcccgcctc agagactcga actttccaat gaatagatta 420
tcccagggtg ctgcgtccag gctggtgtct gggttctgtg ccccttcccc accccagggtg 480
tctgtccat tctcaggctg gtcacatggg tggtcctagg gtgtcccatg agagatgcaa 540
agcgccctgaa ttttctgact cttcccatca g 571
```

<210> 421

<211> 571

<212> DNA

<213> Homo sapiens

<400> 421

```
gtaccagggg cagtggggag ccttcccat ctctatagg tcgccgggga tggcctccca 60
cgagaagagg aggaaaatgg gatcagcgct agaagtgcgc cctcccttga atggagaatg 120
gcatgagttt tcctgagttt cctctgaggg cccctcttc tctctaggac aattaaggga 180
tgacgtctct gaggaaatgg aggggaagac agtccctaga atactgatca ggggtccct 240
ttgacccctg cagcagcctt gggaaccatg acttttctc tcaggccttg tctctgcctc 300
acactcagtg tgtttggggc tctgattcca gcacttctga gtcactttac ctccactcag 360
atcaggagca gaagtctctg ttcccgcctc agagactcga actttccaat gaatagatta 420
tcccagggtg ctgcgtccag gctggtgtct gggttctgtg ccccttcccc accccagggtg 480
tctgtccat tctcaggctg gtcacatggg tggtcctagg gtgtcccatg agagatgcaa 540
agcgccctgaa ttttctgact cttcccatca g 571
```

<210> 422

<211> 572

<212> DNA

<213> Homo sapiens

<400> 422

```
gtaccagggg cagtggggag ccttcccat ctctatagg tcgccgggga tggcctccca 60
cgagaagaag aggaaaatgg gatcagcgct agaagtgcgc cctcccttga atggagaatg 120
gcatgagttt tcctgagttt cctctgaggg cccctcttc tctctaggac aattaaggga 180
tgacgtctct gaggaaatgg aggggaagac agtccctaga atactgatca ggggtccct 240
ttgacccctg cagcagcctt gggaaccatg acttttctc tcaggccttg ttctctgcct 300
cacactcagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
gatcaggagc agaagtctct gttcccgcctc cagagactcg aactttccaa tgaatagatt 420
atcccagggt cctgcgtcca ggtggtgtc tgggttctgt gtcccttccc cccccagggt 480
gtcctgtcca ttctcaggct ggtcacatgg gtggtcctag ggtgtcccat gagagatgca 540
aagcgccctga attttctgac tcttcccatc ag 572
```

<210> 423

<211> 572

<212> DNA

<213> Homo sapiens

<400> 423

```
gtaccagggg cagtggggag ccttcccat ctctatagg tcgccgggga tggcctccaa 60
cgagaagaag aggaaaatgg gatcagcgct agaagtgcgc cctcccttga atggagaatg 120
gcatgagttt tcctgagttt cctctgaggg cccctcttc tctctaggac aattaaggga 180
tgacgtctct gaggaaatgg aggggaagac agtccctaga atactgatca ggggtccct 240
ttgacccctg cagcagcctt gggaaccatg acttttctc tcaggccttg ttctctgcct 300
cacactcagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
```

gatcaggagc agaagtctct gttccccgct cagagactcg aacttttccaa tgaatagatt 420
atcccagggtg cctgcgtcca ggctgggtgc tgggtttctgt gccccttccc caccocagggt 480
gtcctgtcca ttctcaggct ggtcacatgg gtgggtcctag ggtgtcccat gagagatgca 540
aagcgctga attttctgac tcttcccatc ag 572

<210> 424
<211> 575
<212> DNA
<213> Homo sapiens

<400> 424
gtaccagggg cagtggggag cctcccccat ctccctatagg tcgccgggga tggcctccca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt tcttgagttt cctctgaggg cccctcttct tctctaggac aattaaggga 180
tgacgtctct gaggaaatgg aggggaagac agtccctaga atactgatca ggggtccct 240
ttgacccctg cagcagcctt gggaaccgtg acttttctc tcaggccttg ttctctgcct 300
cacactcagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
gatcaggagc agaagtcctt gttccccgct cagagactcg aacttttccaa tgaataggag 420
attatccag gtgcctgcgt ccaggctggg gtctgggttc tgtgcccctt cccacccca 480
gggtgtcctg ccattctcag gctggtcaca tgggtgttcc taggggtgtcc catgagagat 540
gcaaagcgcc tgaattttct gactcttccc atcag 575

<210> 425
<211> 575
<212> DNA
<213> Homo sapiens

<400> 425
gtaccagggg cagtggggag cctgccccat ctccctatagg tcgccgggga tggcctccca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt tcttgagttt cctctgaggg cccctcttct tctctaggac aattaaggga 180
tgacgtctct gaggaaatgg aggggaagac agcccctaga atactgatca ggggtccct 240
ttgacccctg cagcagcctt gggaaccgtg acttttctc tcaggccttg ttctctgcct 300
cacactcagt gtgtttgggg ctctgattcc agtacttctg agtcacttta cctccactca 360
gatcaggagc agaagtcctt gttccccgct cagagactcg aacttttccaa tgaataggag 420
attatccag gtgcctgcgt ccaggctggg gtctgggttc tgtgcccctt cccacccca 480
gggtgtcctg ccattctcag gctggtcaca tgggtgttcc taggggtgtcc catgaaagat 540
gcaaagcgcc tgaattttct gactcttccc atcag 575

<210> 426
<211> 575
<212> DNA
<213> Homo sapiens

<400> 426
gtaccagggg cagtggggag cctgccccat ctccctatagg tcggcgggga tgggctccca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt tcttgagttt cctctgaggg cccctcttct tctctaggac aattaaggaa 180
tgacgtctct gaggaaatgg aggggaagac agtccctaga atactgatca ggggtccct 240
ttgacccctg cagcagcctt gggaaccgtg acttttctc tcaggccttg ttctctgcct 300
cacactcagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
gatcaggagc agaagtcctt gttccccgct cagagactcg aacttttccaa tgaataggag 420
attatccag gtgcctgcgt ccaggctggg gtctgggttc tgtgcccctt cccacccca 480
gggtgtcctg ccattctcag gctggtcaca tgggtgttcc taggggtgtcc catgaaagat 540
gcaaagcgcc tgaattttct gactcttccc atcag 575

<210> 427

<211> 574
<212> DNA
<213> Homo sapiens

<400> 427
gtaccagggg cagtggggag cctcccccat ctctataggg tcgcggggga tggcctccca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt tcctgagttt cctctgaggg cccctcttct tctctagaca attaaggaat 180
gacgtctctg aggaaatgga ggggaagaca gtccctagaa tactgatcag ggggtcccctt 240
tgaccctctg agcagccttg ggaaccgtga cttttcctct caggccttgt tctctgcctc 300
acactcagtg tgtttggggc tctgattcca gcacttctga gtcactttac ctccactcag 360
atcaggagca gaagtccttg ttccccgctc agagactcga actttccaat gaataggaga 420
ttatcccagg tgccctgcgtc caggctgggt tctgggttct gtgccccttc cccaccccag 480
gtgtcctgtc cattctcagg ctggtcacat ggggtgtcct aggggtgtcc atgaaagatg 540
caaagcgct gaattttctg actcttccca tcag 574

<210> 428
<211> 575
<212> DNA
<213> Homo sapiens

<400> 428
gtaccagggg cagtggggag ccttccccat ctctataggg tcgcggggga tggcctccca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt tcctgagttt cctctgaggg cccctcttct tctctaggac aattaaggga 180
tgacgtctct gaggaatgg aggggaagac agtccctaga atactgatca ggggtcccct 240
ttgacccttg cagcagcctt ggaaccgtg acttttctc tcaggccttg ttctctgcct 300
cacactcagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
gatcaggagc agaagtcctt gttccccgct cagagactcg aactttccaa tgaataggag 420
attatcccag gtgcctgcgt ccaggctggg gtctgggttc tgtgcccctt cccaccccga 480
gggtgtcctgt ccattctcag gctggtcaca tgggtgttcc taggggtgtcc catgagagat 540
gcaaagcgcc tgaattttct gactcttccc atcag 575

<210> 429
<211> 575
<212> DNA
<213> Homo sapiens

<400> 429
gtaccagggg cagtggggag ccttccccat ctctataggg tcgcggggga tggcctccca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt tcctgagttt cctctgaggg cccctcttct tctctaggac aattaaggga 180
tgacgtctct gaggaatgg aggggaagac agtccctaga atactgatca ggggtcccct 240
ttgacccttg cagcagcctt ggaaccgtg acttttctc tcaggccttg ttctctgcct 300
cacactcagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
gatcaggagc agaagtcctt gttccccgct cagagactcg aactttccaa tgaataggag 420
attatcccag gtgcctgcgt ccaggctggg gtctgggttc tgtgcccctt cccaccccga 480
gggtgtcctgt ccattctcag gctggtcaca tgggtgttcc taggggtgtcc catgagagat 540
gcaaagcgcc tgaattttct gactcttccc atcag 575

<210> 430
<211> 587
<212> DNA
<213> Homo sapiens

<400> 430
gtaccagggg cagtggggag ccttccccat ctctgtaga tctccggga tggcctccca 60
cgaggagggg aggaaaatgg gatcagcgct agaatatcgc cctcccttga atggagaatg 120

```

ggatgagttt  tcctgagttt  cctctgaggg  cccctctgc  tctctaggac  aattaaggga  180
tgaagtcctt  gaggaaatgg  aggggaagac  agtccctaga  atactgatca  ggggtccctt  240
ttgaccactt  tgaccactgc  agcagctgtg  gtcaggctgc  tgacctttct  ctcaggcctt  300
gttctctgcc  tcacgctcaa  tgtgtttaaa  ggtttgattc  cagcttttct  ggtccttcg  360
gcctccactc  aggtcaggac  cagaagtgcg  tgttccctcc  tcagagacta  gaactttcca  420
atgaatagga  gattatccca  ggtgcctgtg  tccaggctgg  cgtctggggt  ctgtgcccc  480
ttccccaccc  caggtgtcct  gtccattctc  aggatggtca  catgggcgct  gttggagtgt  540
cgcaagagag  atacaaagtg  tctgaatttt  ctgactcttc  ccgtcag  587

```

<210> 431
 <211> 587
 <212> DNA
 <213> Homo sapiens

```

<400> 431
gtaccagggg  cagtggggag  ccttccccat  ctccctgtaga  tctcccgga  tggcctccca  60
cgaggagggg  aggaaaatgg  gatcagcgct  agaatatcgc  cctcccttga  atggagaatg  120
ggatgagttt  tcctgagttt  cctctgaggg  cccctctgc  tctctaggac  aattaaggga  180
tgaagtcctt  gaggaaatgg  aggggaagac  agtccctgga  atactgatca  ggggtccctt  240
ttgaccactt  tgaccactgc  agcagctgtg  gtcaggctgc  tgacctttct  ctcaggcctt  300
gttctctgcc  tcacgctcaa  tgtgtttaaa  ggtttgattc  cagcttttct  ggtccttcg  360
gcctccactc  aggtcaggac  cagaagtgcg  tgttccctcc  tcagagacta  gaactttcca  420
atgaatagga  gattatccca  ggtgcctgtg  tccaggctgg  cgtctggggt  ctgtgcccc  480
ttccccaccc  caggtgtcct  gtccattctc  aggatggtca  catgggcgct  gttggagtgt  540
cgcaagagag  atacaaagtg  tctgaatttt  ctgactcttc  ccgtcag  587

```

<210> 432
 <211> 587
 <212> DNA
 <213> Homo sapiens

```

<400> 432
gtaccagggg  cagtggggag  ccttccccat  ctcccgtaga  tctcccgga  tggcctccca  60
cgaggagggg  aggaaaatgg  gatcagcgct  agaatatcgc  cctcccttga  atggagaatg  120
ggatgagttt  tcctgagttt  cctctgaggg  cccctctgc  tctctaggac  aattaaggga  180
tgaagtcctt  gaggaaatgg  aggggaagac  agtccctgga  atactgatca  ggggtccctt  240
ttgaccactt  tgaccactgc  agcagctgtg  gtcaggctgc  tgacctttct  ctcaggcctt  300
gttctctgcc  tcacgctcaa  tgtgtttgaa  ggtttgattc  cagcttttct  ggtccttcg  360
gcctccactc  aggtcaggac  cagaagtgcg  tgttccctcc  tcagagacta  gaactttcca  420
atgaatagga  gattatccca  ggtgcctgtg  tccaggctgg  cgtctggggt  ctgtgcccc  480
ttccccaccc  caggtgtcct  gtccattctc  aggatggtca  catgggcgct  gttggagtgt  540
cgcaagagag  atacaaagtg  tctgaatttt  ctgactcttc  ccgtcag  587

```

<210> 433
 <211> 587
 <212> DNA
 <213> Homo sapiens

```

<400> 433
gtaccagggg  cagtggggag  ccttccccat  ctcccgtaga  tctcccgga  tggcctccca  60
cgaggagggg  aggaaaatgg  gatcagcgct  agaatatcgc  cctcccttga  atggagaatg  120
ggatgagttt  tcctgagttt  cctctgaggg  cccctctgc  tctctaggac  aattaaggga  180
tgaagtcctt  gaggaaatgg  aggggaagac  agtccctaga  atactgatca  ggggtccctt  240
ttgaccactt  tgaccactgc  agcagctgtg  gtcaggctgc  tgacctttct  ctcaggcctt  300
gttctctgcc  tcacgctcaa  tgtgtttgaa  ggtttgattc  cagcttttct  ggtccttcg  360
gcctccactc  aggtcaggac  cagaagtgcg  tgttccctcc  tcagagacta  gaactttcca  420
atgaatagga  gattatccca  ggtgcctgtg  tccaggctgg  cgtctggggt  ctgtgcccc  480
ttccccaccc  caggtgtcct  gtccattctc  aggatggtca  catgggcgct  gttggagtgt  540

```

cgcaagagag atacaaagtg tctgaatttt ctgactcttc ccgtcag

587

<210> 434
<211> 587
<212> DNA
<213> Homo sapiens

<400> 434
gtaccagggg cagtggggag ccttccccat ctctctgtaga tctcccggga tggcctccca 60
cgaggagggg aggaaaatgg gatcagcgct agaatatcgc cctcccttga atggagaatg 120
ggatgagttt tcttgagttt cctctgaggg cccctctcgc tctctaggac aattaaggga 180
tgaagtcctt gaggaaatgg aggggaagac agtccctaga atactgatca ggggtccctt 240
ttgaccactt tgaccactgc agcagctgtg gtcaggctgc tgacctttct ctcaggcctt 300
gttctctgcc tcacgctcaa tgtgtttgaa ggtttgattc cagcttttct gagtcccttcg 360
gcctccactc aggtcaggac cagaagtcgc tgttcctccc tcagagacta gaactttcca 420
atgaatagga gattatccca ggtgcctgtg tccaggctgg cgtctgggtt ctgtgcccc 480
ttccccaccc caggtgtcct gtccattctc aggatggtca catgggcgct gttggagtgt 540
cgcaagagag atacaaagtg tctgaatttt ctgactcttc ccgtcag 587

<210> 435
<211> 588
<212> DNA
<213> Homo sapiens

<400> 435
gtaccagggg cagtggggag ccttccccat ctctctgtaga tctcccggga tggcctccca 60
cgaggagggg aggaaaatgg gatcagcgct agaatatcgc cctcccttga atggagaatg 120
ggatgagttt tcttgagttt cctctgaggg cccctctcgc tctctaggac aattaaggga 180
tgaagtcctt gaggaaatgg aggggaagac agtccctgga atactgatca ggggtccctt 240
ttgaccactt tgaccactgc agcagctgtg gtcaggctgc tgacctttct ctcaggcctt 300
gttctctgcc tcacgctcaa tgtgtttgaa ggtttgattc cagcttttct gagtcccttcg 360
gcctccactc aggtcaggac cagaagtcgc tgttcctccc tcagagacta gaactttcca 420
atgaatagga gattatccca ggtgcctgtg tccaggctgg cgtctgggtt ctgtgcccc 480
ttccccaccc caggtgtcct gtccattctc aggatagtc catgggcgct gttggagtgt 540
cgcaagagag atacaaagtg tctgaatttt ctgactcttc ccgtcag 588

<210> 436
<211> 587
<212> DNA
<213> Homo sapiens

<400> 436
gtaccagggg cagtggggag ccttccccat ctcccgtaga tctcccggca tggcctccca 60
cgaggagggg aggaaaatgg gatcagcgct agaatatcgc cctcccttga atggagaatg 120
ggatgagttt tcttgagttt cctctgaggg cccctctcgc tctctaggac aattaaggga 180
tgaagtcctt gaggaaatgg aggggaagac agtccctgga atactgatca ggggtccctt 240
ttgaccactt tgaccactgc agcagctgtg gtcaggctgc tgacctttct ctcaggcctt 300
gttctctgcc tcacgctcaa tgtgtttgaa ggtttgattc cagcttttct gagtcccttcg 360
gcctccactc aggtcaggac cagaagtcgc tgttcctccc tcagagacta gaactttcca 420
atgaatagga gattatccca ggtgcctgtg tccaggctgg cgtctgggtt ctgtgcccc 480
ttccccaccc caggtgtcct gtccattctc aggatggtca catgggcgct gttggagtgt 540
cgcaagagag aaacaaagtg tctgaatttt ctgactcttc ccgtcag 587

<210> 437
<211> 587
<212> DNA
<213> Homo sapiens

<400> 437

```
gtaccagggg cagtggggag ccttcccat ctctgtaga tctccggga tggcctccca 60
cgaggagggg aggaaaatgg gatcagcgct ggaatatcgc cctcccttga atggagaatg 120
ggatgagttt tcttgagttt cctctgaggg cccctctgc tctctaggac aattaaggga 180
tgaagtcctt gaggaatgg aggggaagac agtccctgga atactgatca ggggtccct 240
ttgaccactt tgaccactgc agcagctgtg gtcaggctgc tgacctttct ctcaggcctt 300
gttctctgcc tcacgctcaa tgtgtttaaa ggtttgattc cagcttttct gagtccttcg 360
gcctccactc aggtcaggac cagaagtcgc tgttccctcc tcagagacta gaactttcca 420
atgaatagga gattatccca ggtgcctgtg tccaggctgg cgtctgggtt ctgtgcccc 480
ttccccaccc caggtgtcct gtccattctc aggatggtca catgggcact gttggagtgt 540
cgcaagagag atacaaagtg tctgaatttt ctgactcttc ccgtcag 587
```

<210> 438

<211> 587

<212> DNA

<213> Homo sapiens

<400> 438

```
gtaccagggg cagtggggag ccttcccat ctctgtaga tctccggga tggcctccca 60
cgaggagggg aggaaaatgg gatcagcgct ggaatatcgc cctcccttga atggagaatg 120
ggatgagttt tcttgagttt cttctgaagg cccctctgc tctctaggac aattaaggga 180
tgaagtcctt gaggaatgg aggggaagac agtccctgga atactgatca ggggtccct 240
ttgaccactt tgaccactgc agcagctgtg gtcaggctgc tgacctttct ctcaggcctt 300
gttctctgcc tcacgctcaa tgtgtttaaa ggtttgattc cagcttttct gagtccttcg 360
gcctccactc aggtcaggac cagaagtcgc tgttccctcc tcagagacta gaactttcca 420
atgaatagga gattatccca ggtgcctgtg tccaggctgg cgtctgggtt ctgtgcccc 480
ttccccaccc caggtgtcct gtccattctc aggatggtca catgggcact gttggagtgt 540
cgcaagagag atacaaagtg tctgaatttt ctgactcttc ccgtcag 587
```

<210> 439

<211> 587

<212> DNA

<213> Homo sapiens

<400> 439

```
gtaccagggg cagtggggag ccttcccat ctctgtaga tctccggga tggcctccca 60
cgaggagggg aggaaaatgg gatcagcgct agaatatcgc cctcccttga atggagaatg 120
ggatgagttt tcttgagttt cctctgaggg cccctctgc tctctaggac aattaaggga 180
tgaagtcctt gaggaatgg aggggaagac agtccctgga atactgatca ggggtccct 240
ttgaccactt tgaccactgc agcagctgtg gtcaggctgc tgacctttct ctcaggcctt 300
gttctctgcc tcatgtcaa tgtgtttgaa ggtttgattc cagcttttct gagttcttca 360
gcctccactc aggtcaggac cagaagtcgc tgttccctcc tcagagacta gaactttcca 420
atgaatagga gattatccca ggtgcctgtg tccaggctgg cgtctgggtt ctgtgcccc 480
ttccccaccc caggtgtcct gtccattctc aggatggtca catggccgct gttggagtgt 540
cgcaagagag atacaaagtg tctgaatttt ctgactcttc ccgtcag 587
```

<210> 440

<211> 587

<212> DNA

<213> Homo sapiens

<400> 440

```
gtaccagggg cagtggggag ccttcccat ctctataga tctccggga tggcctccca 60
cgaggagggg aggaaaatgg gatcagcgct agaatatcgc cctcccttga atggagaatg 120
ggatgagttt tcccagttt cctctgaggg cccctctgc tctctaggac aattaaggga 180
tgaagtcctt gaggaatgg aggggaagac agtccctgga atactgatca ggggtccct 240
ttgaccactt tgaccactgc ggcagctgtg gtcaggctgc tgacctttct ctcaggcctt 300
```

```

gttctctgcc tcacactcaa tgtgtctgaa ggtttgatto cagcttttct gagtccttcg 360
gcctccactc aggtcaggac cagaagtcgc tgttccctcc tcagagacta gaactttcca 420
aagaatagga gattatccca ggtccctgtg tccaggctgg cgtctgggtt ctgtgcccc 480
ttccctaccc caggtgtcct gtccattctc aggatggtca catgggcgct gctggagtgt 540
cgcaagagag atacaaagtg tctgaatttt ctgactcttc ccgtcag 587

```

<210> 441

<211> 587

<212> DNA

<213> Homo sapiens

<400> 441

```

gtaccagggg cagtggggag ccttccccat ctctataga tctcccgga tggcctccca 60
cgaggagggg aggaaaatgg gatcagcact ggaatatcgc cctcccttga atggagaatg 120
gcatgagttt tcctgagttt cctctgaggg cccctctgct tctctaggac aattaagggg 180
tgaagtctct gaggaatgg aggggaagac agtccctgga atactgatca ggggtctcct 240
ttgaccactt tgaccactgc agcagctgtg gtcaggctgc tgacctttct ctcaggcctt 300
gttctctgcc tcacactcaa tgtgtctgaa ggtttgatto cagcttttct gagtcctgca 360
gcctccactc aggtcaggac cagaagtcgc tgttccctcc tcagagacta gaactttcca 420
atgaatagga gattatccca ggtgcctgtg tccaggctgg cgtctgggtt ctgtgcccc 480
ttccccaccc caggtgtcct gtccattctc aggatggtca catgggcgct gctggagtgt 540
cccaagagag atgcaaagtg tctgaatttt ctgactcttc ccgtcag 587

```

<210> 442

<211> 245

<212> DNA

<213> Homo sapiens

<400> 442

```

gtgagtgacc cgggccccgg ggcaggtca cgactcccca tccccacgt acggccccgg 60
tcgccccgag tctccgggtc cgagatccgc cccctgaggc cgcgggaccc gccagaccc 120
tcgaccggcg agagccccag gcgcgtttac ccggtttcat tttcagttga ggccaaaatc 180
cccgcgggtt ggtcggggcg gggcggggct cggggggacg gggctgaccg cggggccggg 240
gccag 245

```

<210> 443

<211> 246

<212> DNA

<213> Homo sapiens

<400> 443

```

gtgagtgacc cgggccccgg ggcaggtca cgacctctcc ccatccccca cggacggccc 60
gggtgccccc gagtctcccc gtctgagatc cccccgagg ctgcggaacc cgcccagacc 120
ctcgaccgga gagagcccca gtcaccttta cccggtttca ttttcagttt aggccaaaat 180
ccccgcgggt tggtcggggc tggggcgggg ctcgggggac ggggctgacc acggggggcg 240
ggccag 246

```

<210> 444

<211> 598

<212> DNA

<213> Homo sapiens

<400> 444

```

gtaccagggg ccacggggcg cctccctgat cgctgtaga tctcccgga tggcctccca 60
caaggagggg agacaattgg gaccaacact agaatatcgc cctccctctg gtctgaggg 120
agaggaatcc tcctgggttt ccagatcctg taccagagag tgactctgag gtccgcct 180
gctctctgac acaattaagg gataaaatct ctgaaggaat gacgggaaga cgatccctcg 240

```

```

aatactgatg agtgggttccc tttagacacac accggcagca gccttggggc cgtgactttt 300
cctctcaggc cttgtttctct gcttcacact caatgtgtgt gggggtctga gtccagcact 360
tctgagttccc tcagcctcca ctcaggtcag gaccagaagt cgctgttccc tcttcaggga 420
ctagaatttt ccacggaata ggagattatc ccagggtgct gtgtccaggc tgggtgtctgg 480
gttctgtgct cccttcccca tcccagggtgt cctgtccatt ctcaagatag ccacatgtgt 540
gctggaggag tgtcccatat agatgcaaat gcoctgaatgt tctgactctt cctgacag 598

```

<210> 445

<211> 574

<212> DNA

<213> Homo sapiens

<400> 445

```

gtaccagggg cagtggggag ccttccccat ctcttatagg tcgccgggga tggcctccca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt tcctgagttt cctctgaggg cccctcttct tctctaggac aattaaggga 180
tgacgtctct gaggaatgg aggggaagac agtccctaga atactgatca ggggtcccct 240
ttgacccctg cagcagcctt gggaccgtga ctttctctct caggccttgt tctctgcctc 300
acactcagtg tgtttggggc tctgattcca gcacttctga gtcactttac ctccactcag 360
atcaggagca gaagtccctg ttccccgcctc agagactcga actttccaat gaataggaga 420
ttatcccagg tgctgcctgc caggctgggtg tctgggttct gtgcccttcc cccaccccag 480
gtgtcctgtc cattctcagg ctggtcacat ggggtggtct aggggtgtccc atgagagatg 540
caaagcgctt gaattttctg actcttccca tcag 574

```

<210> 446

<211> 587

<212> DNA

<213> Homo sapiens

<400> 446

```

gtaccagggg cagtggggag ccttccccat ctctgtaga tctccgggga tggcctccca 60
cgaggagggg aggaaaatgg gatcagcgct agaatactgc cctcccttga atggagaatg 120
ggatgagttt tcctgagttt cctctgaggg cccctcttgc tctctaggac aattaaggga 180
tgaagtcctt gaggaatgg aggggaagac agtccctgga atactgatca ggggtcccct 240
ttgaccactt tgaccactgc agcagctgtg gtcaggetgc tgacctttct ctccaggcctt 300
gttctctgcc tcacgtctca tgtgtttgaa ggtttgatcc cagcttttct gagtccttcg 360
gcctccactc aggtcaggac cagaagtgcg tgttctctcc tcagagacta gaactttcca 420
atgaatatga gattatccca ggtgcctgtg tccaggctgg cgtctggggt ctgtgcccc 480
ttccccaccc cagggtgtct gtccattctc aggatggtca catgggcgct gttggagtgt 540
cgcaagagag atacaaagtg tctgaatttt ctgactcttc ccgtcag 587

```